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Quentin Meillassoux: An exploration of the science-fiction *extro* and its implication for the science fiction literary genre

Quentin Meillassoux. (2015). ***Science Fiction and Extro-Science Fiction.*** **1st edition. Minneapolis: Univocal Publishing | ISBN 9781937561932 | 93 pages**

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SUBJECT

Book review

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Abstract

Hume's problem is a philosophical problem that is still controversial today. Hume asked what guarantees and assures us that the laws of physics will continue to apply in the future. Philosophers such as Immanuel Kant and Karl Popper explored Hume's problem in several ways. However, for Quentin Meillassoux, Kant and Popper's solutions do not answer the core of Hume's problem. He explained that there are two kinds of representations in seeing the response to this problem: the representation of science fiction and extro-scientific fiction. In his work, Meillassoux examines the arguments individually and offers solutions to the possibility of the extro-scientific fiction genre in literature. This article aims to review Meillassoux's book entitled Science Fiction and Science-Extro Fiction. This study uses a textual analysis method on Meillassoux's work entitled Science Fiction and Science-Extro Fiction. The results of the analysis of this article reveal that extro-scientific fiction can be distinguished by genre from science fiction within Meillassoux's framework of thought. What is expected from Meillassoux's explanation in this article is to discuss extra-scientific fiction as an alternative medium for thinking about the future full of possibilities.

Keywords: Extro-Science Fiction; Science fiction; Contingency; Future; Ontology; Quentin Meillassoux.

1. Introduction

Quentin Meillassoux's name rose high among philosophy academics after he released the book After Finitude: An Essay on The Necessity of Contingency (AF) in 2008 (Meillassoux, 2008). After the book was released, there was a philosophical turn. This turn was called the speculative turn, in which Meillassoux was one of the pioneers. After pouring out his "strange" and challenging thoughts, Meillassoux received criticism from various thinkers. These criticisms were contained in the book The Speculative Turn: Continental Materialism and Realism, published in 2011. Philosophers such as Graham

Harman, Ian Hamilton Grant, Ray Brassier, Slavoj Zizek, Manuel DeLanda, Levi R. Bryant, and many more participated in enlivening the speculative turn. They responded positively and negatively to Meillassoux's Speculative Materialism thoughts (Bryant et al., 2011).

Meillassoux's thinking changed the philosophical climate at that time—especially the contemporary French philosophical tradition. Perhaps we will go back a few centuries. In the 1960s, there was a moment when all kinds of thinking that emphasized 'difference' were born. We can mention the names of these thinkers, such as Jacques Derrida, Gilles Deleuze, Jacques Lacan, Jean-Francois Lyotard, and Michel Foucault. Some of their thoughts may be known as 'post-modern' thinkers, who are still voiced today. However, if observed, there has been a significant shift in discourse since the 1980s with the publication of Alain Badiou's book entitled L'être et l'événement in 1988. Martin Suryajaya expertly describes this shift in discourse. Martin explains that,

> "While post-modernists emphasize the relativity of truth to language, culture, and power, Badiou wants to prove the absoluteness of truth; while philosophers of difference understand humans as limited creatures who cannot voice the truth, Badiou tries to formulate assumptions for the possibility of subjects accessing the truth; while philosophers of difference—following Heidegger's footsteps—use poetry as a paradigm of philosophy and dismiss mathematics as a mode of philosophy that is too 'positivistic' and 'calculative', Badiou uses mathematics as the true paradigm of philosophy. Today, we are right at the heart of that transition" (Suryajaya, 2016).

This shift was further attempted by Badiou's student, Meillassoux, through the book AF, which contains how he criticized correlationism. Correlationism, in short, is any tendency of thought that establishes a close connection between subject and object in such a way that (as if) it is impossible to study one separately from the other. In other words, the position of correlationism is anti-realist. This position, infested with correlationism is what Meillassoux neatly critiques argumentatively with speculative materialism—a speculative thought about objective materiality free from the mediation of the subject's consciousness or the principle of sufficient reason (Suryajaya, 2016).

In 2013, Meillassoux wrote a French article entitled *Métaphysique et fiction des mondes hors-science*. This article was translated by Alyosha Edlebi into Science Fiction and Extro-Science Fiction and published as a book by Univocal Publishing in 2015. In this book there is also a novel by Isaac Asimov entitled The Billiard Ball which is one of Meillassoux's references in compiling his argument about extro-science fiction. This quite challenging thought becomes the anchor of his speculative materialism.

Meillassoux emphasizes that his aim in discussing this is not to challenge the idea that extra science fiction has similarities with ordinary science fiction but rather to examine the fundamental differences between the two. He offers two possibilities. The first possibility is that there is no novel literature that genuinely represents what is called extra-science fiction in futuristic literature. This means that the science fiction genre remains subject to how scientific cause-and-effect logic forms and regulates the narrative structure. In other words, all science fiction stories fall within certain limits that distinguish them from what can be called extra-science fiction. Science fiction, in this possibility, does not have elements that go beyond its definition. The second possibility

is that some works of extro-science fiction exist but are in a very different narrative realm. In this sense, extro-science fiction becomes a kind of "oddity" or "anomaly" within science fiction that goes beyond the logic of scientific causality. This opens up new possibilities for the exploration of narratives about a world that is assumed to be contingent and unexplainable by science (Meillassoux, 2015).

Meillassoux is also philosophically interested in extra-scientific fiction because it is the source of a classic metaphysical problem, namely the problem of induction. We may be more familiar with Hume's explanation in the Treatise of Human Nature and the Enquiry on Human Understanding about the necessity of the laws of nature. This problem of induction was called "Hume's Problem" by one of the most important epistemologists of the 20th century, Karl Popper. Popper explored this problem and gave a rigorous and original response. Interestingly, for Meillassoux, Popper failed to understand Hume because he confused the problem of extra-scientific fiction with the problem of science fiction. In other words, Popper used a different kind of imagination. If Hume mobilized the imagination of extra-scientific fiction in posing his problem, Popper posed a problem that could only be imagined by the imagination of science fiction. It needs to be emphasized again: Popper failed to understand Hume (Meillassoux, 2015).

After discussing Popper's response to Hume's problem, Meillassoux turns to Immanuel Kant's response to Hume's problem in the Critique of Pure Reason. For Meillassoux, Kant's explanation differs from Popper's. Kant understands the right domain to understand Hume's problem, which involves "fictionalizing" a world in which science is impossible. However, Meillassoux finds Kant's explanation to be flawed. Meillassoux criticizes Kant's thesis by showing that the transcendental deduction stems from an extra-scientific imagination that is still limited in several ways. Finally, Meillassoux provides a third, sharper response to Hume's problem that differs from Popper's and Kant's responses (Meillassoux, 2015).

In this article, (1) I will review Quentin Meillassoux's book, Science Fiction and Extro-Science Fiction—how Meillassoux builds a theoretical construction of extro-science fiction. In addition, (2) I will provide examples of novel literature that Meillassoux considers to be the extro-science fiction genre—I will also add one novel to strengthen the existence of the extro-science fiction genre.

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2. Methods

In the data analysis process, the researcher used a historical-factual philosophical data analysis model regarding the figure formulated by Anton Bakker and Charris Zubair (Bakker & Zubair, 1990), so that this study took four stages of data analysis, namely (1) the researcher interpreted Quentin Meillassoux's thoughts, especially thoughts on extro-scientific fiction. This first stage aims to understand Meillassoux's main ideas about extro-Scientific Fiction; (2) Meillassoux's thoughts are studied as a case study, namely by analyzing the central concept (induction) and the vision and concepts that apply to Meillassoux (deduction); (3) conducting internal coherence, namely an activity in which the researcher tries to find a common thread that strengthens the compatibility between Meillassoux's extra-scientific fiction and its differentiation with the science fiction genre; (4) conducting critical reflection, namely a process of reflecting on Meillassoux's thoughts

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as a fundamental theory in understanding the development of literature. This reflection then resulted in a finding that extra-scientific fiction can be an alternative medium in literature.

3. Discussion

Meillassoux explicitly puts forward a categorical distinction between two speculative worlds. These two worlds can emerge due to and are related to how one represents science-based fiction. The two fiction genres are the science fiction genre and the extro-scientific fiction genre. Let us start with the science fiction genre. Meillassoux explains that,

> "In science fiction, the relationship between fiction and science seems to be this: it is a matter of imagining a fictional future of science that modifies, and often expands, its capacity to understand and master reality. Man's relationship with the world is transformed by the modifications of scientific knowledge, which opens up unimaginable possibilities for him. Whatever changes are introduced by the possible future, they remain—at the heart of science fiction—within the realm of science. Every science fiction implicitly maintains this axiom: it will still be possible to subject the world to scientific knowledge in the projected future. Science will be transfigured by its new powers, but it will still exist. Hence, of course, the generic name for this type of literature: fiction can produce extreme variations, but at its heart, there is always science, even if in a form that is no longer recognizable" (Meillassoux, 2015).

From the explanation above, science fiction is a world where science may exist as a particular practice and form of knowledge. Although these fictional worlds may be different from the world we experience—whether it is an imaginary future or a possible future—they still follow some logic that allows the practice of science as we understand and follow it today. A world that obeys a law when several theories are proposed, tested, and predicted based on certain regularities consistently (Meillassoux, 2015).

Something new that Meillassoux brings up is seen in the second type—extro-science fiction. About this, he states that,

> "By the term 'extro-scientific worlds' we do not mean worlds simply devoid of science, that is, worlds in which experimental science does not exist. For example, in worlds in which humans have not, or have never, developed a scientific relationship with reality, By extro-scientific worlds we mean worlds in which, in principle, experimental science is impossible, not simply unknown. Extro-scientific fiction thus defines a specific imaginary regime in which structured—or rather destructured—worlds are imagined so that experimental science cannot apply its theories or construct objects. The guiding question of extro-scientific fiction is: What should the world be like, or what should it be like so that it is in principle inaccessible to scientific knowledge so that it cannot be the object of natural science?" (Meillassoux, 2015).

As we have seen, Meillassoux attempts to imagine a world in which the physical rules of the universe change regularly enough that no theory is stable enough to be proposed or developed. Any such theory would quickly become inaccurate or useless (McFadden,

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2022). This imagined world is based on Hume's problem, Kant's response, and (for Meillassoux) Popper's misunderstanding, which will be explained in the next section.
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3.1. Hume's Problems, Kant's Response, and Popper's Misunderstanding

Hume's problem begins with David Hume's explanation in the Enquiry on Human Understanding. Hume poses the problem of causal certainty as a description of an imaginary billiard game. There is a quote in the book that Meillassoux takes that is quite relevant. The quote reads,

> "When I see, for instance, a billiard ball moving in a straight line towards another, even if the motion of the second ball were not due to chance or the impulse of their contact, am I not able to imagine that a hundred different events might have followed from that cause? Is it possible that both balls should remain at rest? Is the first ball possibly returning straight or bouncing off the second in some other line or direction? All these assumptions are consistent and conceivable. Why, then, should we prefer one which is not more consistent or conceivable than the other? All our reasoning a priori will never be able to show any ground for this preference" (Hume, 2007).

If we look deeper, the question Hume asks is about what guarantees and assures us that the laws of physics will still apply in the next moment---the future. We can explain this from the a priori (logic) and a posteriori (experience) approaches. From a logical point of view, there is no contradiction in imagining that the laws of nature that have been valid up to a particular moment---say time t---suddenly cease to apply or change at time t + 1. In formal logic, a contradiction occurs only if an entity simultaneously has a specific property (a) and the opposite property (non-a). However, if an entity---the universe---is in a state---subject to the laws of physics---and then moves to a state of non-a---no longer subject to those laws---logic will state that this is an inconsistency. Thus, there is no reason to reject the possibility that the laws of physics can change when viewed logically (Meillassoux, 2015).

When logic cannot guarantee that these laws will remain consistent (in the future), a posteriori approach through experience can be considered. However, a major problem appears. If we look at the nature of experience, we only have access to the past (what has happened) and the present (what is happening). There is no guarantee regarding future experience. Here, Hume wants to emphasize that our belief in the consistency of the laws of physics is not the result of logic or direct experience but rather the pull of habits or long-formed inductive assumptions. Hume's sceptical approach caused dissatisfaction among later philosophers, such as Kant and Popper (Meillassoux, 2015).

Meillassoux begins with Popper's explanation—which he considers a misunderstanding—of Hume's problem. Popper elaborated on this in The Logic of Scientific Discovery and several subsequent works. For Popper, there is no guarantee that the laws of nature will hold. Rather than viewing this as a weakness, he saw it as a strength of science. In his view, science is not about finding final truths but rather about proposing hypotheses that can be tested and refuted by new experiments. Popper

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introduced the concept of falsifiability, the ability of a theory to be refuted by experimental results. If a theory survives repeated testing, it does not make it definitively "true" but merely "not yet refuted." Through falsifiability, Popper also rejected the traditional inductivism view that relies on collecting empirical evidence to establish the absolute truth of a theory. For him, no matter how many experiments support a theory, it is still vulnerable to future refutation. He argued that this gives science its dynamism—a never-ending process in which new theories are proposed, tested, and replaced by old ones (Meillassoux, 2015).

However, for Meillassoux, Popper misinterprets Hume's problem, which lies in an inadequate understanding of the ontological problem raised by Hume. Popper raises the epistemological question of whether our scientific theories can be disproved in the future by new experiments, which focuses on how scientific knowledge develops and is tested. However, Hume is not just talking about scientific theories that can be tested or disproved but also highlights the stability of the laws of physics themselves—that is, the stability of the processes that shape the physical world. Hume raises the question of the possibility of change in the laws of nature themselves, which is ontological, not merely epistemological. Hume focuses on a more profound question—how can we be sure that the laws of nature will remain the same, or even persist, in the future? (Meillassoux, 2015).

Hume mobilizes a more radical imagination that asks not only about our ability to understand the world in the future but also about the possibility that the world itself could become too chaotic to be modelled by science. This is what is called extro-scientific fiction. On the other hand, Popper assumes that even though these theories can be refuted and replaced, science will still be valid as a relevant method. This is called science fiction because it maintains the idea that science can still understand and explain the world (Meillassoux, 2015).

Let us take it to the realm of story development for literature. We can draw some distinctions focusing on the narrative and metaphysical implications between the worlds of science fiction and extro-science fiction. In science fiction, the world created usually has a particular order, although it is different from the laws of our world. Science fiction imagines an alternate reality where the laws of physics or biology may differ, but there are still coherent laws or rules. Such a world allows for the development of a plot because the actions of individuals in it have predictable consequences based on the laws of that world. For example, in a science fiction novel, someone can plan a murder or space travel because there are rules in that world that provide structure and predictability.

In contrast, extro-science fiction depicts an utterly chaotic world with no order or law. Everything happens haphazardly or randomly in such a world, so there is no predictability. Because no order or rules provide coherence, the narrative becomes impossible. There is no room for structured action, plans, or logical consequences, so the story cannot develop. This world is more like chaos than something called a "world" in a cohesive sense (Meillassoux, 2015).

Having examined Popper's argument (and misunderstanding) about Hume's problem, Meillassoux turns to Kant's response. Although Kant is correct in his response to Hume, his explanation is quite complex in the Critique of Pure Reason. Kant addresses Hume's challenge using the "objective deduction from the categories." Essentially, this deduction aims to show the legitimacy of applying the categories of the understanding—causality, for example—to experience. The fundamental problem is that these categories

are universal and a priori, while the subject's experience is always fragmented in particular situations. Kant's task, in other words, is to show how categories such as causality can be legitimately applied to experience by taking an epistemological path based on contradiction. He shows that the collapse of the laws of physics would destroy science and consciousness. Here, Kant approaches Hume's problem with a transcendental answer: consciousness requires a world that scientific laws can understand; a world without law destroys science and the entire concept of "the world" as something that can be experienced and understood (Meillassoux, 2015).

Kant explores the limits of perception and representation when the laws underlying reality are replaced by pure chaos in three stages. In the first stage, Kant explains that the difference between perception and dream is causal relations that organize experience. Objective perception depends on categories such as causality that structure the representations we experience. Without these causal relations, representation would be identical to a dream. Some phenomena occur randomly without regularity, which allows for specific identification or judgment. In such a world, the empirical imagination can no longer organize representation. In other words, everything would dissolve into random and directionless fluctuations. Then, a lawless reality would not provide time or structure for entities to form and persist. In such extreme conditions, objects would lose their integrity, and even the moment of perception or the memory of the destruction itself could not occur. Finally, it is about the consequences for the subject who tries to observe this chaos. Kant shows that in a reality where the continuity of time is disturbed, self-consciousness cannot survive. At this point, reality does not just resemble a dream. Without the laws of nature, all that remains is a fragmented intuition, without connection and without meaning (Meillassoux, 2015).

From the three stages of analysis above, Kant emphasizes that the presence of laws is a fundamental condition for our representation and experience. Thus, Hume's hypothesis about the possibility of the disappearance of laws challenges science and cancels all the prerequisites for the experience of the world. However, Kant's argument will have enjoyable and problematic consequences for the realm of imagination. He not only refutes Hume's hypothesis but also indirectly challenges the potential of a literary genre that tries to depict pure chaos. This chaos does not provide a foothold for narrative, perception, or imagination (Meillassoux, 2015). So, how does Meillassoux philosophically defend the existence of the extro-scientific fiction genre?

3.2. Meilassoux's Alternative Speculative Fiction World

In this section, we will see how Meillassoux constructs a theoretical construct of a "non-Kantian possible world." A world that challenged Kant's argument about the necessity of natural laws as an absolute condition for the existence of science and consciousness. Meillassoux tries to present an "extra-scientific" world that opens up space for order without necessity or even order that is strangely woven amidst disorder.

In his critique of Hume, Kant argued that the world would be incomprehensible and chaotic without the laws of nature. However, Kant implicitly relied on the assumption that a world without laws would also be subject to some probabilistic logic. In other words, if every element in the world could act arbitrarily without any rules, then the chances of a stable global order would be very slim—for a world without laws would tend to be chaotic. Kant also ignored important possibilities, such as the idea that a world without laws would not necessarily be subject to any particular probabilistic or statistical

laws. This idea opened the door to speculative thinking about a world different from Kant's assumption. Such a world would not have the limits of being orderly or disorderly but would have the potential to be both simultaneously. A world in which experience was possible even without underlying laws. This critique thus anticipated Kant's view that the order of natural laws was necessary for the existence of the world and of consciousness (Meillassoux, 2015).

In exploring an extra-scientific world, Meillassoux offers three accounts—three world types. The Type 1 world explanation explores how a world without universal causal laws can still support the existence of science and consciousness. This Type 1 world is where the disorder is limited and does not disrupt the general structure of the natural order. Uncaused events can occur in this context, but they are too rare and unsystematic to threaten the continuity of the scientific method and conscious experience. In this world, uncaused events might be dismissed as dreams or hallucinations, but witnesses to the events have a way of confirming that their experiences are real. Conscious experience can still accommodate their existence without losing stability. Then, the Type 2 world explanation is a world where the disorder is severe enough to destroy the foundations of science but still stable enough to support everyday life and the existence of consciousness. Uncaused events occur so frequently that scientific experiments cannot produce consistent results in such a world. No universal laws can be formulated because the behaviour of nature is too variable and unpredictable. However, this does not mean that humans have lost the ability to understand or adapt to their reality. A relative degree of order allows humans to survive and carry out daily activities. Consciousness develops to adapt to conditions not subject to scientific laws. Finally, the type-3 world is absolute chaos and disorder. In this realm—following the example of chaos described by Kant in objective deduction—there are conditions for science and consciousness that will be erased (Meillassoux, 2015).

Of the three types of worlds above, Meillassoux takes his philosophical position on the type-2 world. For Meillassoux, this world, which is different from Kant and Popper's views, challenges the belief that the laws of nature are absolute and stable. This world shows that contingency is a valid idea because no logical contradiction or empirical evidence can reject it. Thus, the question now is how this seemingly perfect order can occur in the context of contingency. Meillassoux also questions whether this extra-scientific fiction can develop into a literary genre different from science fiction. Furthermore, the genre of extra-scientific fiction can be used to explore ideas that go beyond the boundaries of traditional scientific laws and imagine worlds based on fragile stability (Meillassoux, 2015).

3.3. What would an extro-science fiction novel look like? –Is it possible?

In this section, the discussion narrows down to answer the questions "What are the requirements for an extro-science fiction story?" and "What are examples of extro-science fiction novels". For Meillassoux, there is a significant difficulty in building an extro-science fiction novel, namely that it must start from the concept of absolute "coincidence"—in other words, events that occur without cause and cannot be predicted. In extro-science fiction, sudden and unprovoked changes in the laws of nature can occur, making it challenging to create an interesting and unique storyline without sacrificing its integrity.

According to Meillassoux, a story considered extro-science fiction must meet two requirements. First, it must include events that any real-world or imaginary logic cannot explain. Second, the storyline must involve the idea of science, even in a negative form—such as a world where science is impossible or even irrelevant. As a result, XSF creates stories that focus on "gaps" or inconsistencies, making it a truly unique and challenging genre. Meillassoux proposes three solutions that can be applied to produce extro-science fiction stories, although they do not claim accuracy and completeness (Meillassoux, 2015).

The first proposed solution introduces the "single break ." A single break is a catastrophic physical event that suddenly changes the world and causes unexplained phenomena to occur en masse. Meillassoux gives the example of the novel Darwinia by Robert Charles Wilson. In March 1912, Europe and its entire population mysteriously disappeared, leaving the same continent inhabited by a completely different flora and fauna—the result of an alternative evolution. This event contradicts existing scientific theory, especially Darwin's theory of evolution. However, although the disaster seems inexplicable, it is revealed that the world is not the original Earth. Instead, it is an archive created by the noosphere (the collective mind layer of the galaxy) that seeks to preserve memory to counter the threat of the universe's demise. The story illustrates how a world that initially seems unreasonable is eventually understood through a larger framework, even if it cannot be explained scientifically (Meillassoux, 2015).

Nonsense events that are closer to absurdity and increase the sense of humour. Meillassoux gives the example of the novel The Hitchhiker's Guide to the Galaxy by Douglas Adams. The novel tells the story of a machine that can produce "infinite impossibilities," such as turning missiles into flowers or a whale meditating as it falls from the sky. Although these events seem ridiculous, they still follow coherent logic because the machine is based on probabilistic reasoning. However, even though there is a reason behind this, the machine still does not produce completely uncaused events, so it does not meet the XSF criteria that require more radical uncertainty (Meillassoux, 2015). The third solution is to create a world that is disintegrating or collapsing so that reality becomes increasingly difficult to understand or unrecognizable. Meillassoux gives the example of Philip K. Dick's novel Ubik. This novel tells the story of a real-world that suddenly becomes obsolete and events that violate the laws of physics. There are unexplained phenomena, such as the face of someone who has just died appearing in a particular place or a name that appears in a television advertisement for no apparent reason. Such phenomena are suitable for the extro-science fiction genre. However, even though the world in this novel works arbitrarily, causal explanations still emerge and provide reasons behind the changes, bringing the story into a science fiction narrative framework. Of the three solutions (and examples of novels) proposed above, all of them attempt to create a world that is not entirely understandable by science. However, some events that seem "extro-scientific" can eventually be recaptured in the logic of cause and effect, like a science fiction narrative (Meillassoux, 2015).

In addition to the several examples of novels given by Meillassoux above that are thought to be extro-scientific but can be recaptured in the logic of cause and effect, I will add one novel widely read by literature and film lovers. The novel is entitled Three-Body Problem by Cixin Liu. The novel tells the story of Ye Wenjie, a college student who witnesses the destruction of his world after his father, a physics professor, is tortured to death for his beliefs considered anti-Communist at the height of the Chinese Cultural

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Revolution. He is then forced to work in a labour camp in Mongolia, where he meets journalist Bai Mulin, who exposes the environmental damage caused by humans. After a letter to the Chinese government ends in fatal consequences, Ye is taken to a secret military base, Radar Peak, where he works on the Red Coast, a project aimed at searching for alien life. There, Ye sends a message into space that brings answers from Trisolaris, a planet with three suns that destroyed its civilization. This message forms the basis for the emergence of the Earth-Trisolaris (ETO) organization, which supports the Trisolaris invasion of Earth. Years later, Wang Miao, a nanomaterials technology expert, is involved in an international effort to counter the threat posed by Trisolaris. As technology advances and Wang gains a deeper understanding of the virtual game "Three-Body," he reveals that Trisolaris exists, and its inhabitants are planning to invade Earth. They have created sophons, super-intelligent particles that can halt human scientific progress. In meetings with ETO members, including Ye Wenjie, Wang learns that humanity is now trapped in a life-and-death game involving a more advanced and unpredictable civilization. With the threat looming, Wang and his colleagues must find a way to survive amidst the inevitable waves of change. At first, I thought the Three-Body Problem was the best example of extro-science fiction. This is evident when the novel presents a world where the laws of nature change radically, quantum intervention in creating the 'sophon' particle, and several other events. However, I reconsidered when the novel's narrative showed its image of rationality and tied itself into a science fiction narrative (Liu, 2014).

After his confusion about several novels considered "extro-science fiction" but ended up as "science fiction" narratives, Meillassoux gives the example of his latest novel, Ravage by René Barjavel. This novel is often misunderstood as a work of science fiction. However, for Meillassoux, this novel features parts that align with the extro-science fiction genre. Ravage has strange events, such as when electricity suddenly disappears without a clear scientific explanation in 2052. Although the characters in the story put forward scientific or theological theories, the narrator does not give a definitive explanation. Barjavel prefers to focus on the immediate impact of the event—the destruction and chaos that occurs and the struggle of the protagonists to survive. In doing so, the novel creates a constant tension between the uncertainty and absurdity of the events that makes the reader more focused on the actions and consequences of the event rather than trying to understand its causes. The novel Ravage, for Meillassoux, can be an example of extra-scientific fiction that raises the tension between ignorance and unexpected possibilities without tying and drawing its narrative to scientific logic (Meillassoux, 2015).

From all of Meillassoux's theoretical explanations above, extro-science fiction can develop into a genuinely independent fiction genre with unique procedures. These procedures allow the narrative to continue even though the world depicted appears chaotic and unstable. The uniqueness of extro-science fiction is seen in its ability to anticipate chaos in the world without returning to logical explanations like science fiction narratives. Extro-science fiction has the potential to develop a future narrative that is full of possibilities. In other words, the core of what can be achieved through extro-science fiction is a form of creative and philosophical exploration beyond the boundaries of a world that can be understood scientifically with specific laws.

4. Conclusion

This paper examines Quentin Meillassoux's thoughts in his book Science Fiction and Extro-Science Fiction. Meillassoux responds to the classical metaphysical problem raised by David Hume regarding the certainty of the laws of physics in the future. Hume questions what guarantees that these laws of nature will continue to apply. Philosophers such as Immanuel Kant and Karl Popper have attempted to respond to this problem. However, for Meillassoux, both Kant and Popper failed to capture the essence of Hume's problem. He proposed two categories of representation, namely science fiction and extro-scientific fiction. Extro-scientific fiction is assumed to offer a more radical perspective on the possibility of a world where the laws of physics can no longer be applied and tested. In his analysis, Meillassoux distinguishes between science fiction rooted in scientific logic and experience and extro-scientific fiction that goes beyond these boundaries. While science fiction operates within the framework of existing knowledge, extro-scientific fiction depicts a world where science cannot be applied at all. This opens up space for new narrative explorations unrelated to causal explanations. In this way, Meillassoux critiques previous thinking on Hume's problem and introduces a new genre in literature that can help us think about the future more openly and creatively based on possibility (contingency).

Through this analytical approach, this article aims to explore Meillassoux's argument and provide direct examples from the literature that attempts to reflect the genre of extro-scientific fiction. By examining the fundamental differences between these two types of fiction, the reader is expected to understand the philosophical implications of Meillassoux's thinking and how it can extrapolate discussions about the future of science and literature itself. This is an important step in understanding how we can imagine realities that may not be accessible to the scientific method. It also opens opportunities to imagine new ways of understanding the relationship between order, chaos, and human experience.

Bibliography

Bakker, A., & Achmad Charris Zubair. (1990). Philosophy Research Methodology. Yogyakarta. Kanisius Publisher.

Bryant Levi, Srnicek Nick, & Graham Harman. (2011). The Speculative Turn: Continental Materialism and Realism. Melbourne. Re-Press.

Liu, C. (2014). The Three-Body Problem. New York. Tor.

McFadden, Dan. (2022). Unthinkable Crimes: Representation, Knowledge, Serial Killers in Contemporary Television: Familiar Monsters in Post-9/11 Culture. New York. Routledge.

Suryajaya, Martin. (2016). Dialectical Materialism: A Study of Marxism and Contemporary Philosophy. Yogyakarta. Resist Book.

Quentin, Meillassoux. (2008). After Finitude: An Essay on the Necessity of Contingency. New York. Continuum.

Quentin, Meillassoux. (2015). Science Fiction and Extro-Science Fiction. Minneapolis. Univocal Publishing.