Structuralism Analysis of Basho's Poem on The Theme of Spring: Saussure's Theory and AI Implications

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Abstract

This article analyzes Matsuo Basho's poem with a spring theme through the structuralism approach of Ferdinand de Saussure, with a particular emphasis on the role of artificial intelligence (AI) in literary analysis. In the current digital context, a deep understanding of literary texts is becoming increasingly relevant, and this research aims to explore how AI can enrich structuralist analysis and enhance reader interaction with poetry. By employing Saussure's theory, this article highlights the relationship between the signifier and the signified in the poem, as well as how AI can assist in identifying and analyzing the linguistic patterns present in the text, including the unique characteristics of spring-themed poems. The methods applied include linguistic analysis combined with AI technology, enabling a deeper and more comprehensive exploration of meaning. The findings indicate that the integration of linguistic theory with AI tools not only strengthens the relevance of structuralist analysis but also opens new opportunities for understanding literary works within the context of contemporary culture. The conclusion of this research emphasizes the importance of the dynamic interaction between language, meaning, and technology, as well as how AI can significantly contribute to shaping the reading experience and understanding of literary texts.

Keywords: *Artificial Intelligence (AI); literary analysis;poem; Saussure; structuralism*

A. Introduction

Haiku poem is a type of poetry that originated in Japan. Initially, poem was divided into three main schools, namely *teimon, danrin,* and *bashō*. In its writing, poem follows certain rules, including a 5-7-5 syllable structure, the use of *kireji*, and the inclusion of *kigo*. *Kigo* is a word related to seasonal changes and is used in poem and other literary forms to create imagery and express emotions specific to one of the four seasons. (Nipponia, No. 24, 2005). *Kigo* can refer to natural phenomena, weather, animals, plants, or various customs, foods, and drinks associated with a particular season or month. The presence of *kigo* seems to serve as a natural expression that

communicates with the surrounding humans. Another characteristic of poem is the presence of *kireji,* marked by *joshi* (particles) or *jodōshi* (auxiliary verbs), which serve to cut the sentence and provide emphasis or meaning that reflects the poet's subjective feelings (modality), such as longing, happiness, or melancholy. *Kireji* not only influences the aesthetic aspect but also the themes being addressed. In the context of technological and contemporary cultural developments, the analysis of this literary work becomes increasingly relevant, especially with the emergence of artificial intelligence (AI) that can change the way a person understands and interacts with literary texts.

Previous research related to poem and themed around spring can be found in Yusroh's (2023) study titled *Analysis of Metaphors in Spring-Themed Poem by Matsuo Basho.* The similarity between this research and Yusroh's (2023) study is that both use Matsuo Basho's poem with a spring theme as the data source. Furthermore, in this study, the researcher examines the relationship

between the *signifier* and the *signified*, as well as the meaning found in each line of the poem written by Matsuo Basho with a spring theme, focusing on Saussure's semiotic theory and the implications of AI in poem meaning analysis. In this case, the structuralism approach proposed by Saussure offers a strong theoretical framework for analyzing the relationship between language elements in poetry, namely between the *signifier* and the *signified*. This allows researchers to uncover the layers of meaning contained within the work.

Saussure, in his famous work *Course in General Linguistics* (1916), introduced the concept of the sign as the basic unit of communication. A sign consists of two main components, namely the *signifier* and the *signified*.

Signifier: This is the physical form of the sign, such as words, sounds, or symbols that we see or hear. *Signifier* is an element that can be perceived and functions as a representation of meaning. In the context of poem poetry, *signifier* can be words used by the poet. For example, in Basho's collection of

poems themed around spring, there are markers that include words like *furu* (old), *ike* (pond), and *ya* (kireji that indicates an impression).

The second is the **signified**. This is the concept or meaning associated with the signifier. The signified includes images, emotions, or ideas that arise in the reader's mind when they read the signifier. In Bashō's poem example, the signified can encompass various meanings related to the beauty of nature, tranquility, solitude, and reflections on time.

Saussure emphasizes that the relationship between the signifier and the signified is *arbitrary*. This means that there is no direct relationship between the physical form and the meaning produced. For example, the word "pond" as a signifier does not have an intrinsic meaning attached to it, its meaning is formed through social conventions and individual experiences. This means that meaning is not determined by the form of the word itself, but by the context and associations formed in the reader's mind.

The analysis of poem through Saussure's concepts of signifier and signified provides deep insights into how meaning is constructed in this brief poem. Several aspects that can be analyzed include the following.

Word Choice: In poem, every word carries significant weight. The signifier chosen by the poet are not merely tools of communication, but also an integral part of creating atmosphere and meaning. For example, the term "cherry blossoms" as a signifier not only refers to a type of flower but also carries connotations related to beauty, sadness, and transience. In the context of Japanese culture, cherry blossoms are often associated with ephemeral beauty and the changing of seasons, adding depth to their meaning.

Ambiguity and Interpretation: Poem often rely on ambiguity to create various interpretations. The signifier used can have multiple signified depending on the context and the reader's experience. This creates space for readers to interact with the text and find meanings that are relevant to them. For example, the signifier "pond" in Bashō's poem can be

understood as a symbol of tranquility, but it can also be associated with self-reflection or deep memories.

Connotation and Denotation: In poem analysis, it is important to distinguish between *connotation* (additional meanings associated with a signifier) and *denotation* (literal meaning). For example, in a poem depicting winter, the signifier "snow" may have a simple denotation (falling snowflakes) but can also carry deeper connotations (silence, stillness, or even sadness). By understanding these connotations, readers can sense a richer nuance in the work.

Relation Between Signs: Saussure also emphasized that meaning is determined not only by the signifier and the signified themselves but also by the relations between various signs within a system. In poem, the relationship between different signifiers (for example, "flower" and "season") can create more complex and rich meanings. For instance, in Bashō's poem, the relationship between the signifiers "furu" and "ike" can create meanings related to the passage of time and

solitude.

In this article, Saussure's structuralism theory will be applied to analyze Bashō's poem, focusing on how the structure of language shapes meaning. In addition, this research will also explore how AI technology, such as ChatGPT, can be used to analyze language patterns, symbolism, and the unique characteristics of poem. By leveraging AI's ability to identify patterns and provide new insights, we can enrich reader interaction with the text and enhance understanding of the nuances contained in the poem.

The aim of this research is to demonstrate the relevance of structuralism analysis in understanding literary works in the digital era, as well as to make a significant contribution to literary studies and discussions regarding the role of AI in shaping contemporary culture. The significance of this research lies in its ability to connect linguistic theory with modern technology, which is expected to stimulate further discussion on the dynamic interaction between language, meaning, and technology in

the context of literature. Thus, this research not only contributes to literary studies but also to a broader understanding of how technology can influence the way we interact with classical literary works, as well as enrich the reader's experience in navigating the complexities of meaning present.

B. Research Method

This study employs a qualitative approach with text analysis methods, focusing on the application of Ferdinand de Saussure's structuralism theory to analyze Matsuo Bashō's poem themed around spring. According to Moleong (2010), qualitative research aims to understand social phenomena through the collection and analysis of in-depth data. In this context, a qualitative approach allows researchers to explore the dimensions of meaning contained in poetry more holistically, including how modern technology, particularly artificial intelligence (AI), can enrich the analysis.

The primary data in this research comes from five spring-themed poems by Matsuo Bashō. Meanwhile, the secondary data used as research references is obtained from the book 芭蕉全句集 (Basho Zen Kushuu) as well as relevant previous research journals. In addition, literature related to Saussure's structuralism theory and the application of AI in literary analysis is also used as supporting data sources. This is in line with Creswell's (2014) opinion, which states that the selection of relevant data sources is very important to support the validity of the research. This research also refers to other works, such as Barthes (1967) who emphasizes the importance of semiotic analysis in understanding texts, and Eco (1976) who discusses the relationship between signs and meanings in a cultural context.

In this study, the data analyzed consisted of two main components: the haiku texts themselves and the linguistic interpretations resulting from the structural analysis. The haiku text serves as the object of analysis, while the meaning contained in the language structure of the poem becomes the main focus. In this

research AI technologies, such as ChatGPT, were used as an additional reference, the main analysis is fully carried out by the the researcher himself by considering various existing reference sources. AI only acts as a complementary source that provides new insights into language patterns and symbolism that may be missed in traditional analysis, in line with Liu's (2020) views on the use of AI in text analysis. The data collection techniques used in this study include literature review and document analysis. The researcher collected data by reading and analyzing various references related to Bashō's poem, Saussure's theory, and the application of AI in literary analysis. As stated by Arikunto (2013), literature study is an effective method for collecting relevant and in-depth information on the topic being researched. In addition, sources such as Guba and Lincoln (1989), which discuss validity and credibility in qualitative research, are also considered to ensure the quality of this research.

The data analysis technique applied in this research is semiotic analysis based on Saussure's theory, which is explained in his famous work, Course in General Linguistics (1916). In the work, Saussure introduced the concept of a sign consisting of signifier and signified, and explained how the relationship between the two forms a meaning. The researcher will analyze the relationship between *signifier* and *signified* in haiku texts, as well as how the language structure shapes the meaning contained therein. Although AI is integrated to help identify patterns of language, meaning, and symbolism in the poems, the main analysis still comes from the author's personal interpretation. The use of AI in text analysis is in line with Liu's (2020) view and also with Bhatia's (2011) opinion that technology can improve linguistic analysis by providing new tools for data exploration..

Thus, the research method applied is expected to provide a deeper understanding of the meaning in Bashō's spring-themed poem, as well as show how structuralism approaches and AI technology can contribute to a more comprehensive

literary analysis. This research also aims to show that while AI can serve as an effective tool in exploring and analyzing structure and meaning in poem, the analysis must be carried out entirely by the researcher himself. By integrating theories and references from various sources, this research seeks to create a richer and deeper analytical framework.

C. Results and Discussion

In this section, the researcher will present the results of the analysis of Matsuo Basho's spring-themed poem using a structuralism approach based on Ferdinand de Saussure's theory. The results of this analysis aim to address the research problem regarding the meaning contained in the poem as well as the implications of using artificial intelligence (AI) in literary analysis. The discussion of these results will be divided into two subsections: (a) Structural Meaning and (b) AI Implications in Literary Analysis.

1. Structural Meaning

In the context of structuralism, the meaning in Basho's poem is not only found in the words themselves but also in the relationships between the elements. *The pond* as a symbol of eternity and the *sound of water* as a symbol of life create a dialectic that illustrates the cycle of nature. Saussure's theory emphasizes that meaning is formed through the differences and relationships between elements, so this analysis shows that Basho's poem invite readers to reflect on the relationship between eternity and transient life. In this case, AI can serve as a tool to analyze and deepen our understanding of the language structure used by Basho, thereby clarifying the interaction between *signifier* and *signified.*

Here are the results of the analysis of signifier and signified as well as the structural meaning in 5 poems by Matsuo Basho themed around spring, based on Saussure's semiotic theory:

Table 1. Analysis of signs in Basho's poem on the theme of spring

No	*Signifier*	*Signified*
1	古池や (ふるいけや) 蛙飛び込む (かわずとびこむ) 水の音 (みずのおと)	This poem begins with a scene and ends with a sound. "the old pond," describes a pond surrounded by dense trees, creating a vast and immeasurable atmosphere.

	In the old pond A frog jumps (into the pond) Sound of water	"the frog jumps (into the pond)," narrows the focus to a brief moment. "Sound of water," adds an auditory dimension to the existing visual imagery.
2	春の夜は (はるのよは) 桜に明けて (さくらにあけて) 仕廻けり（しまいけり） Spring night Dawning with Cherry blossoms	"Spring night" implies a beautiful night atmosphere in spring, full of hope. "Dawning with Cherry blossoms" shows the transition of the night ending with the enjoyment of cherry blossoms, then the beauty of the night has quickly passed, evoking a sense of melancholy about the transient nature of natural beauty.
3	花の陰 (はなのかげ) 謡に似たる (うたいににたる) 旅寝哉 (たびねかな) Shadow of flowers Resembling a song Sleeping on a journey	"Shadow of flowers": Describes a calm and beautiful atmosphere, where the beauty of nature creates a gentle and soothing ambiance. "Resembling a song": 'song' here refers to the traditional Japanese song "Futari Shizuka" (二人静), a famous work depicting themes of deep love, sacrifice, and sorrow. "Sleeping on a journey": Implies a moment of rest while on the move, emphasizing the tranquility that can be found in the process of a journey. " Sleeping on a journey ": Suggests a moment of rest during movement, emphasizing the tranquility that can be found in the process of the journey.
4	春なれや (はるなれや) 名もなき山の (なもなきやまの) 薄霞 (うすがすみ) Spring will arrive Nameless mountain Thin mist	"Spring will arrive" - Symbolizes hope and peace, as well as a symbol of renewal and rebirth. "Unnamed mountain" - Represents the simple and unknown beauty of nature, reflecting the sincerity that is often overlooked. "Thin mist" - Offering a gentle and mysterious atmosphere, adding tranquility, and symbolizing transition and subtle beauty in nature.
5	天秤や (てんびんや) 京江戸かけて（きょうえどかけて） 千代の春（ちよのはる） With a scale Comparing Kyoto and Edo Thousands of springs	"With a scale" A symbol of comparison used by Bashō to evaluate Kyoto and Edo. "Comparing Kyoto and Edo" Indicates the difficulty in determining which of the two cities was more prosperous at that time. " Thousands of springs " Symbolizing hope and renewal that come with the beginning of the new year.

2. Interpretation of Signs and Meanings with AI Implications in Literary Analysis

The use of AI in this analysis provides additional insights into language patterns and meanings present in poem. By utilizing natural language processing technology, such as ChatGPT, researchers can conduct more comprehensive analyses. For example, ChatGPT can be used to generate alternative interpretations of poem, providing new perspectives that enrich the discussion. thus making it easier for researchers to collect relevant data.

The analysis of signs and meanings using AI also allows researchers to conduct quantitative analysis of texts, including the identification of recurring patterns and relationships between words that might be overlooked in traditional analysis. By using algorithms that detect recurring themes and symbols in Basho's works, researchers can uncover larger patterns within the context of Japanese literature. This implication shows that technology is not just a tool, but also a partner in the process of literary interpretation, which can broaden the horizons of analysis and provide deeper insights. Here are the results of the sign and meaning analysis using AI, specifically with the help of ChatGPT:

No	Poem Text	Meaning
1	古池や (ふるいけや) 蛙飛び込む (かわずとびこむ) 水の音 (みずのおと) In the old pond A frog jumps (into the pond) Splash of water	This Bashō poem depicts the relationship between tranquility and the eternity of nature through an old pond, while the jumping frog reflects the changes and interactions of life, and the sound of splashing water symbolizes brief yet meaningful moments, inviting us to contemplate the beauty in every aspect of life that is often overlooked.
2	春の夜は (はるのよは) 桜に明けて (さくらにあけて) しまひけり Spring night Dawning with Cherry blossoms	This poem depicts the beauty of a spring night transitioning into morning, where cherry blossoms symbolize ephemeral beauty, inviting us to reflect on the beauty and transience of life and the beautiful moments that occur in a short span of time.
3	花の陰 (はなのかげ) 謡に似たる (うたいににたる) 旅寝哉 (たびねかな)	This poem describes a journey filled with beauty and tranquility, where the shadows of flowers resembling a song create a harmonious

	Shadow of flowers Resembling a song Sleeping on a journey	atmosphere, inviting us to reflect on the peace and beauty that can be found in simple moments as we rest in the midst of life's journey.
4	春なれや (はるなれや) 名もなき山の (なもなきやまの) 薄霞 (うすがすみ) Spring will arrive Nameless mountain Thin mist	This poem depicts the arrival of spring, bringing new beauty, where an unnamed mountain shrouded in thin mist symbolizes the simplicity and elegance of nature, inviting us to reflect on the beauty often overlooked in daily life and the changes brought by the cycles of nature.
5	天秤や (てんびんや) 京江戸かけて（きょうえどかけて） 千代の春（ちよのはる） With a scale Comparing Kyoto and Edo Thousands of springs	This poem reflects the comparison between two major cities, Kyoto and Edo, each with its own beauty and history. By using a scale as a symbol, this poem invites us to reflect on the value and uniqueness of each place, and how thousands of spring seasons that have passed bring invaluable memories and experiences, enriching the cultural heritage of Japan.

In the context of this analysis, the use of AI, particularly with the help of models like ChatGPT, has provided additional insights into understanding the meanings contained in poem. AI can assist in identifying linguistic patterns, offering broader interpretations, and supporting researchers in uncovering meanings that might be overlooked by manual analysis. By leveraging technology, we can enrich our understanding of classical literary works such as Basho's poem, as well as open up space for deeper discussions about the relationship between language, culture, and human experience.

D. Conclusion

Based on the structuralist analysis of Matsuo Basho's spring-themed poem, this research successfully reveals profound meanings through the application of Ferdinand de Saussure's theory. The analysis results show that the relationship between *the signifier* and *the signified* in this poem creates a dialectic that depicts spring filled with the cycles of life, eternity, tranquility, hope, and the representation of life's dynamics, thereby forming a broader understanding of the relationship between humans and nature.

Moreover, the implications of using artificial intelligence (AI) in literary analysis indicate that technology can be an effective tool for uncovering language patterns and symbolism that might be overlooked in traditional analysis. AI allows researchers to identify broader themes in Basho's works, thereby enriching our understanding of classical literature.

However, the researcher felt that while AI provides many benefits in linguistic analysis, it lacks the ability to capture the emotional picture of the poet and the emotional nuances contained in the poem itself. A deep interpretation of meaning often depends on the context of the reader's emotions when reading the haiku, which AI cannot fully represent. The researcher's impression is that the human emotion of both the poet and the reader is an important element that gives depth of meaning to the poem, and this aspect is difficult to be precisely quantified or analyzed by AI algorithms. Therefore, while AI can help in structural analysis and language patterns, emotional experience and subjective interpretation remain a realm that is better understood through a reader's approach.

Suggestion

As a suggestion for further research, the researchers recommend further exploration of the application of AI technology in the analysis of literary works from various cultures and time periods. Research comparing the use of natural elements in Japanese poem with poetry from other literary traditions, such as European Romantic poetry or lyrical poetry from other cultures, can provide new insights into the universality of nature themes in literature. Moreover, the development of more advanced AI models for analyzing context and nuances in poetry can open up opportunities for more in-depth and comprehensive research in the future.

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