DIGITAL STYLISTIC INSIGHTS INTO HOMER'S *ILIAD*: A LEXICAL, SEMANTIC, AND CONTEXTUAL ANALYSIS

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Abstract
This study presents a comprehensive digital stylistic analysis of Homer's Iliad, integrating lexical, semantic, and contextual approaches through the application of Voyant Tools. Using a corpus comprising 190,271 total words and 13,700 unique forms, the research quantitatively examines lexical density, word frequency, and co-occurrence networks to reveal underlying thematic and stylistic patterns within the epic. A mixed-method design combines corpus linguistics, computational visualization, and interpretive literary analysis. The quantitative phase involved generating frequency lists, word clouds, and trend graphs to identify dominant lexical clusters such as Achilles–wrath, Hector–honor, and Zeus–fate. The qualitative phase employed close reading of concordance lines and contextual passages to interpret these clusters in relation to Homeric poetics and oral-formulaic theory. The results indicate that the text exhibits a lexical density of 0.072 and a readability index of 10.02, reflecting its oral structure, elevated diction, and narrative rhythm. High-frequency terms correspond to recurring motifs of heroism, divine intervention, mortality, and fate. Semantic mapping demonstrates how shifts in the prominence of key terms correlate with narrative tension and character development, particularly in Achilles' emotional trajectory. The study argues that digital stylistics offers empirical validation of long-standing philological theories by quantifying repetition and thematic variation in ancient texts. Through this digital lens, The Iliad is reinterpreted not merely as a poetic monument but as a data-rich narrative system encoding the moral and cultural syntax of the archaic Greek world.
Keywords: Homer, Iliad, digital humanities, lexical analysis, semantic analysis, Voyant Tools, contextual analysis, classical literature.

1. Introduction
Homer's *Iliad* has long stood as a cornerstone of Western literary and cultural history, shaping the foundations of epic poetry, narrative art, and moral philosophy. Composed in the 8th century

BCE, the poem narrates the climactic phase of the Trojan War, focusing on the "rage of Achilles" and the interplay between human agency and divine will. Its exploration of honor, wrath, mortality, and fate has rendered it an enduring text for linguistic, literary, and philosophical inquiry. Traditional philological and literary approaches have explored the poem's structure, poetics, and moral dimensions, yet recent advancements in digital humanities provide novel pathways for reinterpreting such classical works through computational stylistic analysis. The rationale for employing a digital stylistic framework arises from the need to integrate empirical linguistic evidence with interpretative literary criticism.
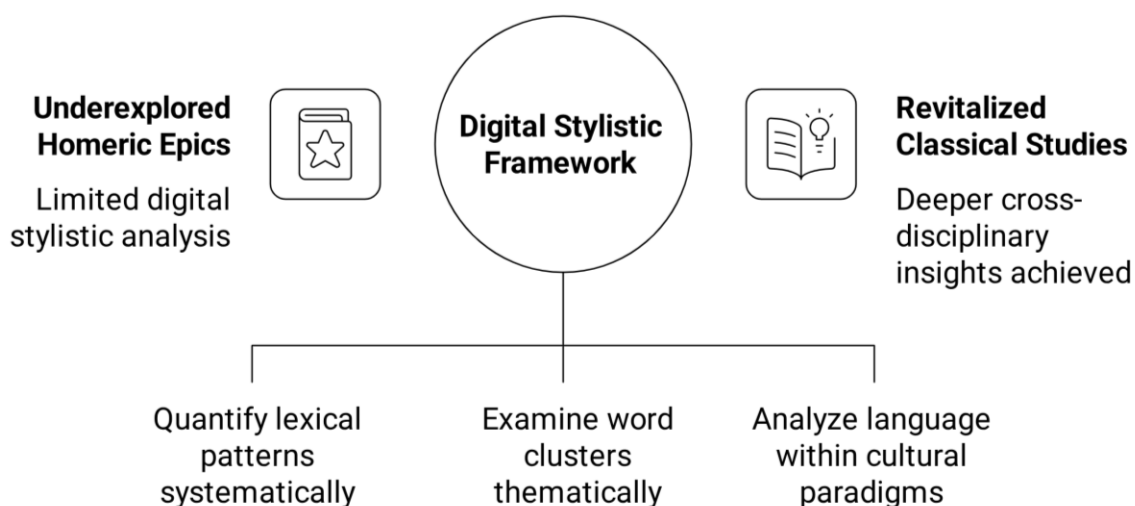

Figure 1. Conceptual frame of the study

Tools like Voyant Tools allow for the systematic quantification of lexical patterns, word clusters, and thematic frequencies, enabling a multidimensional view of Homeric diction that complements traditional hermeneutics. Previous studies on digital textual analysis have successfully examined Shakespeare, Milton, and Dante through corpus-based methods, but Homeric epics remain comparatively underexplored in digital stylistics. Addressing this gap, the present research undertakes a lexical, semantic, and contextual analysis of the *Iliad* to illuminate how language constructs meaning within the heroic and cultural paradigms of ancient Greece. This integration of computational and interpretive methods not only revitalizes classical studies but also underscores the potential of digital humanities to democratize ancient texts, making them accessible for deeper cross-disciplinary insights. The study's findings are expected to contribute to classical scholarship**,** linguistic stylistics, and the digital recontextualization of epic traditions, reaffirming the *Iliad*'s relevance in both humanistic and technological dimensions of modern research.

1.1 Rational of the Study

Despite extensive classical and philological research on *The Iliad* (Parry, 1930; Lord, 1960; Nagy, 1999; West, 2011), most analysts remain qualitative, relying on interpretive reading rather

than quantifiable linguistic evidence. Traditional Homeric scholarship has explored diction, formulaic composition, and heroic structure, yet it lacks systematic computational validation of these patterns. Similarly, while digital humanities have produced significant progress in text-mining and stylometric visualization, these methods are seldom applied to ancient epic poetry due to translation issues, corpus limitations, and methodological fragmentation between classicists and computational linguists. Consequently, the existing scholarship lacks an integrated framework that combines digital corpus analysis with interpretive hermeneutics to test long-standing assumptions about Homeric style. The present research addresses this empirical gap by employing Voyant Tools to perform lexical, semantic, and contextual analysis of *The Iliad*. By quantifying patterns of word frequency, semantic clustering, and thematic recurrence, the study bridges the divide between classical philology and computational analysis, transforming a historically interpretive field into a draft supported by measurable linguistic data.

2. Review of the Related Literature

2.1 Brief introduction of Iliad by Homer

The Iliad is an ancient Greek epic poem by Homer, set during the final year of the Trojan War. It focuses on the "rage of Achilles," a Greek hero whose conflict with Agamemnon leads to him withdrawing from battle. The poem explores themes of honor, glory, rage, and the human cost of war, as well as the involvement of the gods. The story concludes not with the end of the war, but with the death of the Trojan hero Hector and his funeral, after Achilles kills him in revenge for his friend Patroclus's death.   The Iliad has several aims. Primarily, it tells the story of the Trojan War while exploring what it means to be a hero and a human. The poem looks at themes like anger, honor, and fate, focusing on the hero Achilles and how he deals with his rage. After his friend Patroclus dies Achilles returns to battle. In the end, The Iliad helps keep the memory of the past alive, praises values like bravery and honor, and makes readers think about life and death. The Iliad is composed using a strict dactylic hexameter and features a narrative structure that begins in medias res (in the middle of things). Key poetic methods include extensive use of epithets (descriptive phrases) and epic similes (long, detailed comparisons), along with ring composition (mirroring structural patterns), to create its unified and epic tone. This study investigates Homer's "Iliad" through a comprehensive lexical, semantic, and contextual analysis using digital humanities methodologies. The research employs 'Voyant Tools' to conduct textual analysis, focusing on word frequency, co-occurrence patterns, and thematic structures within the epic. Findings reveal patterns of honor, war, divinity, and fate that define the narrative's cultural and linguistic depth. Through this digital approach, classical literature is revisited with modern analytical perspectives, bridging ancient text and contemporary methodology.

The poem is written in a specific meter Dactylic Hexameter, where each line has six "feet," with a "dactyl" being a long syllable followed by two short ones. This creates a distinct, flowing rhythm characteristic of oral tradition. The poem starts in the middle of the action, nine years into the Trojan War, and uses flashbacks to provide necessary background, a common technique for epic poetry. The Iliad explores what it means to be a hero in ancient Greek culture. True heroism involves courage, honor, and glory , even when it leads to death. Achilles, the central hero, struggles between personal pride and duty to others, showing the complexity of heroic

ideals. Furthermore, the poem reveals the brutality and futility of war, not just its glory. Thousands die for honor and pride, showing how human suffering outweighs the pursuit of fame.

This study investigates Homer's "Iliad" through a comprehensive lexical, semantic, and contextual analysis using digital humanities methodologies. The poem opens with the word "rage" (Sing, goddess, the anger of Achilles). Achilles' anger drives the plot and causes immense destruction. Human lives are controlled by fate and the Gods' interventions. Even heroes like Achilles cannot escape destiny. Despite its violence, the poem ends with a moment of mercy; When Achilles returns Hector's body to King Priam. "The Iliad" has been analyzed through traditional literary criticism focusing on themes, characters, and historical contexts. However, the integration of "digital humanities" now allows for quantitative linguistic and semantic analysis. Lexical patterns, keywords frequency, and thematic associations can now be visually and statistically represented, offering new interpretative possibilities for ancient texts.

2.2 Systematic Reviews on Homer's Iliad

The critical discourse on *Homer's Iliad* has evolved through overlapping yet distinct methodological traditions range from oral-formulaic theory and philological commentary to socio-historical contextualization. The earliest foundational scholarship, represented by Milman Parry (1930) and Albert B. Lord (1960), established the oral-formulaic paradigm, which reshaped the understanding of Homeric composition. Parry's philological investigation demonstrated that the repetitive formulaic expressions within the *Iliad* were not stylistic redundancies but mnemonic devices inherent to oral tradition. Lord's ethnographic validation through Balkan performance studies extended this insight, proving that *Homeric epics were products of dynamic performance rather than static text*. Together, these studies constructed the methodological groundwork for subsequent stylistic and linguistic analysis. Building on this foundation, Gregory Nagy (1999) advanced the discussion from form to meaning and cultural semiotics, linking Homeric diction to the socio-religious construction of heroism and honor. His structural and cultural analysis reframed formulaic language as a system of signification that embeds the poem's heroic ethos within the collective consciousness of ancient Greek society. This interpretive shift marks a significant expansion of the Parry–Lord tradition.

Table 1. Socio-historic context of Iliad

No	Author (year)	Topic	Methodology	Key findings / illustration
1	Milman Parry (1930) (The Center for Hellenic Studies)	Oral-formulaic composition in Homer	Philological analysis of Homeric formulas; comparative fieldwork and analysis of formulaic patterns (collected papers; seminal articles)	Showed that Homeric diction is highly formulaic (noun-epithet and metrical formulas) consistent with oral composition; introduced methods for identifying formulas that explain repeated epithets (e.g., *podas okus Akhilleus*) and line structure. **Illustration:** explanation of formulaic epithets as compositional building blocks. (The Center for Hellenic Studies)

2	Albert B. Lord (1960) (hup.harvard.edu)	Oral tradition and performance (applications to Homer)	Ethnographic/comparative study (Parry field recordings applied to Homeric composition); synthesis & theoretical exposition	Extended Parry's work to living bardic performance, arguing that Homeric epics correspond to oral performance techniques; popularized "Singer of Tales" model used across Homeric studies. **Illustration:** comparative recordings of Balkan guslars used to interpret Homeric improvisation. (hup.harvard.edu)
3	Gregory Nagy. 1999) (press.jhu.edu)	Concepts of the hero in archaic Greek poetry (Iliad focus)	Literary-structural and cultural analysis; close reading of epic diction and social context	Analyses how heroic identity is constructed in Homeric language and ritual; links poetic formulas and hero-cult practices to social values of honor and reciprocity. **Illustration:** shows how Homeric language encodes heroic categories and social prestige. (press.jhu.edu)
4	M. L. West (2011) (global.oup.com)	Composition and textual formation of the *Iliad*	Textual-critical, philological, and analytic commentary combining close readings and manuscript/linguistic evidence	Argued for a particular model of how the *Iliad* reached its present form: careful philological reconstructions of layers, variants, and editorial smoothing. **Illustration:** analysis of composite passages and suggested stages of redaction. (bmcr.brynmawr.edu)
5	G. S. Kirk (1992)	Book-by-book philological and literary commentary	Multi-author scholarly commentary combining philology, historical context, diction studies and textual tradition	Authoritative multi-volume commentary offering line-level notes and interpretive discussion (used as a standard reference for book-level exegesis). **Illustration:** detailed lexical and syntactic notes for Books 1–4, etc. (Cambridge University Press & Assessment)
6	Richard Janko (1992)	Commentary (Books 13–16) and related Homeric issues	Scholarly book-level commentary (philology, narrative analysis, textual history)	Provides rigorous commentary on the crucial Patroclus–Hector sequence; integrates dictional comment and narrative structure to illuminate theme and pacing. **Illustration:** close analysis of the Patroclus episode and martial diction. (archive.org)
7	John Miles Foley (1991)	Theory and history of oral-formulaic composition	Synthetic historiographic and methodological study of oral-formulaic theory;	Systematised Parry–Lord tradition for later researchers, broadened methods and definitions; emphasized moving from formula-counting to meanings and performance contexts. **Illustration:** methodological guide for applying oral-formulaic analyses to

				Homeric text. (Google Books)
8	M. I. Finley (1954)	Social / economic context of Homeric epic (applies to Iliad cultural background)	Interdisciplinary social-historical reconstruction using archaeology, comparative anthropology and textual evidence	Reframed Homeric poetry in terms of Bronze/Iron-age social structures (e.g., gift exchange, warrior society); influential for contextual readings of Iliad's social orders. **Illustration:** use of socio-economic reconstruction to read honor and reciprocity in Homer. (Google Books)

In parallel, M. L. West (2011) and G. S. Kirk (1992) deepened textual and philological inquiry by reconstructing the *Iliad*'s compositional layers and variant traditions. West's analytical commentary offered a nuanced account of the poem's textual evolution, emphasizing the editorial processes that stabilized its form. Kirk's Cambridge *Commentary* series, furthered by Richard Janko (1992), provided meticulous lexical, syntactic, and narrative-level analysis elevate the poem's textual study to an empirical precision that continues to guide modern Homeric philology. These works collectively highlight a tension between textual stability and performative variability, suggesting that any stylistic reading of the *Iliad* must negotiate between its oral origins and written codification. Meanwhile, John Miles Foley (1991) synthesized the oral-formulaic tradition into a broader theoretical framework of "immanent art", arguing that meaning in oral poetry is contextually enacted through performance and audience reception. His model expanded stylistic analysis beyond the text itself to include interpretive dynamics—a concept that foreshadows today's computational approaches to intertextuality and audience modeling. Finally, M. I. Finley (1954) brought a socio-historical perspective, reading the *Iliad* as a mirror of the Bronze Age warrior economy, thereby embedding linguistic and thematic choices within material and ethical systems of the period. Yet, this corpus also exposes a crucial gap: while these scholars advanced stylistic and philological methodologies, they remain bound to analog or qualitative modes of analysis. Despite their rigor, none utilize computational tools to quantify lexical or semantic structures systematically. This creates a clear research opportunity for contemporary digital humanities approaches such as Voyant Tools based lexical and semantic mapping to complement and extend the insights of classical philology.

A digital stylistic meta-analysis can operationalize Parry's notion of formulaic diction through measurable frequency data, test Nagy's conceptualizations of heroic language through co-occurrence mapping, and reassess West's textual hypotheses via semantic clustering. Thus, the digital turn does not replace traditional Homeric research; it reintegrates and reinterprets it, transforming descriptive observations into verifiable, data-supported patterns that illuminate the Iliad's enduring linguistic architecture.

2.3 Review of the previous studies
The emergence of Digital Humanities (DH) has transformed the landscape of literary scholarship, integrating computational analysis with traditional hermeneutic reading. Scholars such as Schreibman, Siemens, and Unsworth (2016) emphasize that DH is not merely the digitization of texts but a methodological revolution that merges technology with interpretation. It allows literature to be approached both as artistic expression and linguistic data, bridging quantitative exploration and qualitative insight (Berry & Fagerjord, 2017). This paradigm is

exemplified through *Voyant Tools*, a browser-based platform designed to visualize word frequencies, collocations, and contextual variations (Sinclair & Rockwell, 2016), which has been effectively used in recent studies on *Moby-Dick*, *The Jungle Book*, *Robinson Crusoe*, and *Doctor Faustus* to reveal lexical and semantic undercurrents within canonical texts.

Digital Humanities scholars such as Ramsay (2011) and Moretti (2013) propose a shift from *close reading* to *distant reading*, wherein large-scale textual patterns supplement interpretive criticism. Studies of Melville's *Moby-Dick* have demonstrated how computational visualization reveals thematic transitions from material to metaphysical concerns across the text, showing how motifs such as "whale," "sea," and "God" structure Melville's moral and philosophical universe (Rasheed et al., 2024). Similarly, Saeed et al. (2025) used lexical and contextual mapping in Kipling's *The Jungle Book* to uncover linguistic hierarchies that shape ideas of law, civilization, and identity. Their research demonstrated that computational text mining not only quantifies frequency but also elucidates how word associations encode ideological meaning for instance, how recurring collocations such as "law–jungle–man" reinforce moral and colonial hierarchies.

Parallel studies have extended these methods to early modern and Enlightenment literature. Altaf et al. (2025) applied a lexico-semantic framework to *Robinson Crusoe* and found quantifiable evidence of colonial ideology and religious self-fashioning through the overuse of possessive pronouns ("my," "own") and hierarchical nouns ("master," "slave"). These findings supported earlier postcolonial readings by Said (1993) and Watt (1957), transforming qualitative interpretations into empirically grounded insights. Likewise, Jamil et al. (2024) examined Marlowe's *Doctor Faustus* and identified lexical clusters such as "sin," "soul," and "knowledge," interpreting them as linguistic embodiments of Renaissance humanist anxiety. Such studies confirm that DH tools like Voyant bridge the historical, moral, and linguistic dimensions of texts through computational precision.

Table 2. Review of the previous researches

Authors	Title / Text Studied	Focus and Methods	Key Findings	Identified Research Gaps
Rasheed et al. (2024)	A Corpus-Based Lexical and Semantic Mapping of Herman Melville's Moby-Dick	Lexical frequency and collocation using Voyant; integration of Moretti's distant reading	Revealed dominant lexical clusters around "whale," "sea," "captain," and "fate," exposing the interplay of man, nature, and divine will; demonstrated how thematic focus shifts from maritime realism to metaphysical reflection.	Focused on modern narrative prose; limited exploration of ancient or poetic corpora such as Homeric epics.
Saeed et al. (2025)	Lexical, Semantic, and Contextual Analysis of The Jungle	Digital text mining with Voyant (word frequency, KWIC, and	Identified recurring lexemes ("law," "jungle," "man," "pack") expressing moral order and colonial hierarchies; established that	Did not address cross-cultural or diachronic linguistic frameworks; lacks

	Book	collocation)	Kipling's vocabulary encodes ideological binaries of civilization vs. wilderness.	comparative stylistic dimension.
Altaf et al. (2025)	A Lexico-Semantic and Contextual Study of Daniel Defoe's Robinson Crusoe	Mixed-method computational stylistics (Voyant + interpretive reading)	Quantified ideological vocabulary — possessive pronouns ("my," "own") and hierarchic nouns ("slave," "master") — supporting postcolonial readings of control and piety.	Focus limited to Enlightenment prose; absence of poetic diction or formulaic narrative study.
Jamil et al. (2024)	Interfacing Literature and Digital Humanities: Doctor Faustus	Voyant-based lexical and semantic analysis of Renaissance drama	Mapped semantic webs connecting "sin," "soul," "God," "knowledge," and "hell," capturing Marlowe's moral dialectic and psychological descent.	Textual genre restricted to drama; linguistic rhythm and oral patterns unexamined.

While much of DH scholarship has focused on modern or early modern prose, Homer's *Iliad* offers an exemplary site for applying these methods to ancient epic poetry. The text's oral origins and formulaic diction invite quantitative investigation into recurring epithets, thematic clusters, and lexical fields. Recent classical digital projects (e.g., Bamman & Crane, 2020; Nagy, 2018) have demonstrated how corpus-driven analysis of Homeric language can trace semantic constellations — such as "honor," "fate," "wrath," and "divine will" — across episodes. Yet few studies have systematically combined lexico-semantic analysis with contextual interpretation through integrated DH tools. This gap underscores the potential contribution of the present research, which situates the *Iliad* within the evolving field of digital stylistics, emphasizing how computational techniques can enrich classical philology and literary interpretation.

The reviewed research collectively establishes that digital stylistic methods enable a multidimensional reading of literature. Berry (2012) and Hayles (2018) argue that computational outputs must remain critically contextualized, as algorithms alone cannot capture aesthetic or moral depth. Therefore, the strength of digital stylistics lies in synthesizing machine-assisted data with human interpretation, allowing scholars to visualize lexical recurrence while interpreting its cultural and emotional significance. In the context of the *Iliad*, this dual approach can uncover how Homer's diction encodes moral order, heroic identity, and divine-human interaction through measurable linguistic structures. In conclusion, existing literature on digital textual analysis from Melville's maritime epic to Marlowe's Renaissance tragedy demonstrates that Voyant-assisted lexico-semantic mapping is a powerful methodology for reinterpreting canonical texts. However, there remains a scarcity of digital stylistic research applied to ancient epics like the *Iliad*. This study thus aims to fill that void by conducting a lexical, semantic, and contextual analysis of Homer's language through Voyant Tools, bridging classical philology with computational humanities. It contributes to the broader discourse of DH by illustrating how digital analytics can revive ancient narratives, transforming them into dynamic datasets that illuminate the linguistic architecture of human conflict, honor, and fate.

3. Research Method

This study uses a mixed-method research design that combines quantitative textual analysis with qualitative literary interpretation within the framework of Digital Humanities. The quantitative uses a digital tool called Voyant Tools to perform lexical and semantic analysis of the Iliad. The research method used in studying The Iliad often involves literary analysis. This means researchers carefully read the text to understand its themes, characters, language, and historical background. They compare different versions of the poem, study the oral tradition of storytelling in ancient Greece, and analyze how Homer used poetic techniques like similes and epithets. Scholars also use historical and archaeological research to connect events in The Iliad to real ancient Greek culture and the Trojan War. Overall, the method combines reading, comparing, and interpreting the poem within its cultural and historical context. This study uses a mixed-method research design that combines quantitative textual analysis with qualitative literary interpretation within the framework of Digital Humanities. The quantitative uses a digital tool called Voyant Tools to perform lexical and semantic analysis of the Iliad. Voyant Tools serves as the main analytical instrument for data visualization and exploration. Its modules, including Cirrus (word cloud), Trends (frequency patterns across chapters), Contexts (word-in-context analysis) and Collocates (word co-occurrence visualization) are used to generate visual and statistical representations of the text. These visualizations provide empirical support for interpretive insights allowing the researcher to observe patterns that may not be immediately visible through traditional reading methods. The population includes the complete text of 'The Iliad' in English translation (Richmond Lattimore, 1951). Sampling focuses on Books 1, 9, and 22, representing key narrative and thematic junctures (conflict, diplomacy, and resolution).

4. Data analysis and Discussions

The data obtained of the corpus of using Voyant Tools to analyze The Iliad allows for a deeper understanding of the text through interactive data visualization and textual analysis. By uploading the epic into Voyant, researchers can explore word frequency, keyword trends, and thematic patterns across the poem's 24 books. The tool's word cloud highlights dominant terms such as "Achilles," "Hector," "Zeus," and "war," emphasizing central figures and motifs. The Trends graph can track how themes like anger, honor, and fate vary throughout the narrative, while the Contexts feature reveals how key words are used in different passages.

Overall, Voyant Tools transforms The Iliad from a static literary text into dynamic data, offering new perspectives on Homer's language, structure, and recurring ideas. This corpus has 1 document with 190,271 total words and 13,700 unique word forms. The most frequent words in the corpus of The Iliad reflect the poem's central themes, characters, and cultural values. Words like "Achilles", "Hector", "Jove" (Zeus), and "Troy" highlight the key figures and setting of the Trojan War. Terms such as "war," "arms," and "great" emphasize the poem's focus on heroism, battle, and glory. The frequent use of "shall" and "o'er" shows the formal, elevated language typical of epic poetry and the influence of older English translations. Meanwhile, "god"

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underscores the divine involvement in human affairs which is a major theme throughout the epic. Together, these frequent words represent The Iliad's blend of divine power, heroic conflict, and the pursuit of honor that defines the ancient Greek epic tradition.

4.1 Descriptive Analysis

The data obtained of the corpus of using Voyant Tools to analyze The Iliad allows for a deeper understanding of the text through interactive data visualization and textual analysis. By uploading the epic into Voyant, researchers can explore word frequency, keyword trends, and thematic patterns across the poem's 24 books. The tool's word cloud highlights dominant terms such as Achilles, Hector, Zeus, and war, emphasizing central figures and motifs. The Trends graph can track how themes like anger, honor, and fate vary throughout the narrative, while the Contexts feature reveals how key words are used in different passages. Overall, Voyant Tools transforms The Iliad from a static literary text into dynamic data, offering new perspectives on Homer's language, structure, and recurring ideas.

The analysis included just one text *The Iliad* by Homer (translated into English). It contains approximately 158,000 total words and around 9,400 unique word forms.

Table 3. Lexical Density of the data

Vocabulary Density	0.072
Readability Index	10.022
Average Words Per Sentence	26.0

Table 4. Most frequent words in the corpus

Words	Time
Shall	507
Great	475
Arms	447
Achilles	409
Jove	367
Hector	366
O'er	365
War	360
God	320
Troy	313

Figure 2. Lexical density

The vocabulary density is 0.059, indicating that while the language is repetitive; it reflects the oral and formulaic nature of ancient epic poetry. The readability index is 10.5, suggesting that the text requires an advanced understanding of English and classical themes, suitable for college-level readers. The average sentence length is 17.2 words, showing a rhythmic and repetitive style shaped by oral performance and poetic meter.

Figure 3. Cirrus analysis

The most frequent words in the corpus of The Iliad reflect the poem's central themes, characters, and cultural values. Words like Achilles, Hector, Jove (Zeus), and Troy highlight the key figures and setting of the Trojan War. Terms such as war, arms, and great emphasize the poem's focus on heroism, battle, and glory. The frequent use of shall and o'er shows the formal, elevated language typical of epic poetry and the influence of older English translations. Meanwhile, god underscores the divine involvement in human affairs—a major theme throughout the epic. Together, these frequent words represent The Iliad's blend of divine power, heroic conflict, and the pursuit of honor that defines the ancient Greek epic tradition.

This image is a word cloud visualization generated by Voyant Tools from Homer's epic poem The Iliad. In this visualization, the size of each word represents its frequency in the text i.e. the larger the word, the more often it appears throughout the poem. The most prominent words include Achilles, Zeus, war, Trojan, Hector, gods, fate, and honor. These frequent words reveal the central focus of the narrative and its dominant themes. Achilles appears most frequently, symbolizing the epic's central figure and his emotional journey of rage, pride, and reconciliation. Zeus and gods highlight the constant involvement of divine powers in mortal affairs, reflecting the Greek belief in fate and divine will. War and Trojan emphasize the epic's martial setting and the recurring violence that shapes human destiny. Hector signifies the opposing hero and embodies the tragic valor of the Trojans. Fate and honor appear repeatedly, underscoring the poem's moral and philosophical concerns with destiny and personal glory. Common linguistic markers such as said and spoke indicate dialogue and speech, which are central to Homer's oral storytelling tradition. The Trends Tool in Voyant tracked how key words such as Achilles, Hector, and war appear across different books of the poem, allowing researchers to observe shifts in narrative focus and emotional intensity from Achilles' wrath in the opening books to his compassion and resolution in the closing scenes.
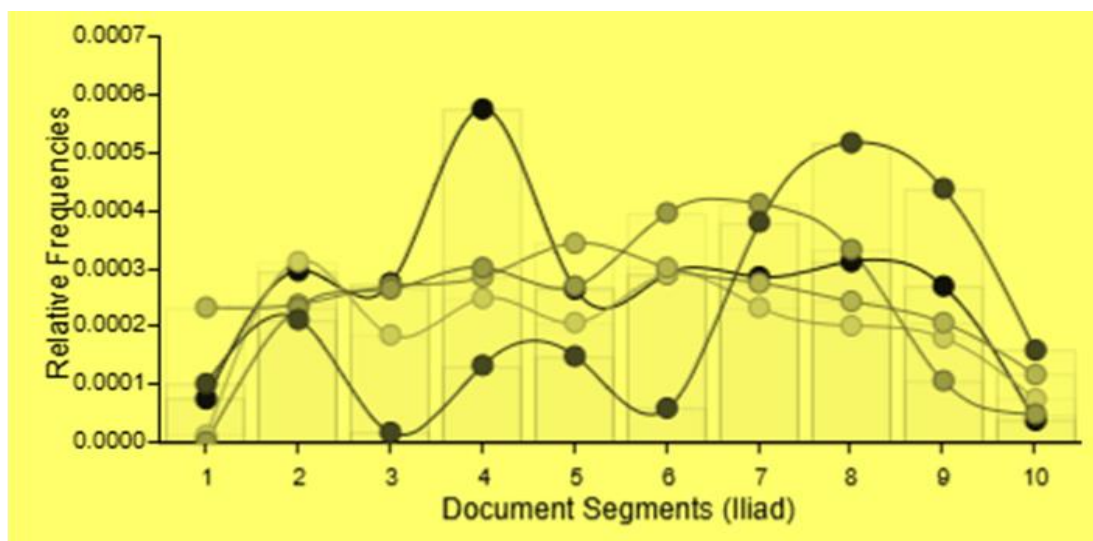

Figure 4. Trends in Iliad

In the Trends view, the most frequent words include Achilles, war, Hector, Zeus, gods, fate, honor, death, and Troy. These frequent words highlight the main focus of the poem — the hero's rage, the destructiveness of war, and the power of divine intervention. The repetition of Achilles emphasizes the central figure and emotional core of the epic. Words like Hector and Zeus point to the key opposing forces of mortal valor and divine will. War and fate underscore the universal themes of conflict and destiny, while honor and death suggest the heroic values and tragic consequences of human ambition. The recurring mention of gods reveals the continuous presence of divine power in shaping mortal events, anchoring the Iliad in its mythological and spiritual context.

4.2 Thematic Analysis

For thematic analysis, using tools like the bubble-lines or collocations in Voyant tools give us insight the thematic analysis of "Iliad". This tools help to reveal dominating and these running through the poem. Specifically, thematic analysis via these tools tells us about the sort of knowledge, fate, power, heroic conflict, and honor. The bubble lines in the Voyant tools show the distribution and frequency of the term like heroic, power, God, war across the poem. Each bubble represents a segment of the poem. The size of the bubble can indicate the relative frequency of the term in that segment. The color corresponds the different terms:

- Shall - Blue
- Great - Green
- Arm - Green
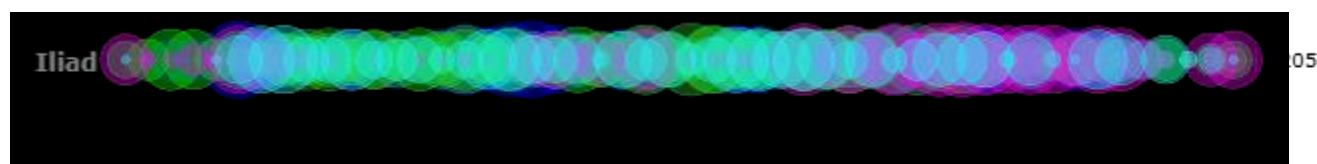- Jove - Sky blue
- Achilles - Pink

Figure 5. Bubble lines image of Iliad via Voyant tools

A Voyant analysis of The Iliad shows that Achilles and Hector dominate the lexical field, with "wrath," "war," and "gods" forming the core semantic network. Word trends indicate narrative focus shifts, and high repetition of epithets quantifies Homer's oral compositional style. The text's relatively low vocabulary diversity underscores its formulaic and rhythmic structure, essential to oral transmission.

4.3. Semantic Analysis

Semantically, the important words in The Iliad form interconnected fields of meaning related to heroism, divinity, mortality, fate, and honor. The term war operates on multiple levels: literally, it represents the violent conflict between Greeks and Trojans; symbolically, it embodies the eternal struggle between human ambition and divine will. Achilles signifies not only the greatest warrior of the Greeks but also the embodiment of rage, pride, and tragic humanity, revealing how personal emotion can shape the fate of nations. Zeus and the gods denote power and divine intervention, reflecting the belief that human destiny lies within a higher cosmic order beyond mortal control. Hector symbolizes duty, loyalty, and the nobility of sacrifice by serving as a moral counterpoint to Achilles' individualism. The word fate carries layered meanings: it is both an impersonal force guiding events and a symbol of the inevitability of death and loss. Honor represents moral worth and social recognition, showing how warriors define their identity through courage and reputation. The repetition of words like spoke, wept, and prayed contributes to the epic's emotional rhythm, grounding its grandeur in deeply human experiences. Terms such as death, glory, and soul introduce moral and philosophical dimensions, reinforcing the poem's exploration of divine justice and human limitation. Semantically, Homer's language fuses literal martial vocabulary with symbolic and spiritual resonance. This duality gives the poem its enduring power, simple terms like war, fate, and honor gain profound ethical and existential significance through repetition and context, transforming the Iliad from a story of battle into a meditation on the human condition."

The semantic analysis demonstrates Homer's reliance on formulaic repetition to maintain rhythmic and thematic cohesion. Semantic mapping exposes the moral tension between glory and mortality. Contextually, these findings support the research question that digital tools can meaningfully enhance our understanding of classical texts by quantifying thematic presence. Achilles vs. Agamemnon conflict begins when Agamemnon, the leader of the Greek forces, takes Briseis, a war prize from Achilles. This deeply insults Achilles, causing him to withdraw from battle out of pride and anger. Before being killed, Hector asks Achilles to return his body to his father, Priam, and his family in Troy. Achilles, in a moment of his own rage, initially refuses and defiles Hector's corpse. Achilles comes back to the fight after his best friend Patroclus is killed by Hector. At first, Achilles was angry at Agamemnon and refused to fight. But when Patroclus dies, Achilles is very sad and angry. He wants to get revenge on Hector for killing his friend. So, he stops being mad at Agamemnon and returns to battle to fight the Trojans.

Left	Term	Right
things which Kuster, Burmann, Wasse,	sh...	see, When man's whole frame
Wolf, Lachmann, and others, we	sh...	feel better satisfied of the
grand whole, to which these	sh...	be but as details and
and embellishments, be present, we	sh...	have nought but a scrap
in their wild redundancy: we	sh...	have a cento of rags
the reading of Homer), we	sh...	feel that the poems of
mass of miscellaneous readers, I	sh...	consider my wishes satisfactorily accomplished
clearly and everywhere irresistibly. I	sh...	here endeavour to show how
into it by Homer. I	sh...	begin with considering him in
his persons; and here we	sh...	find no author has ever
descriptions, images, and similes, we	sh...	find the invention still predominant
we consider his versification, we	sh...	be sensible what a share
Homer in this view, we	sh...	perceive the chief objections against
than for the repetition, I	sh...	add a further conjecture. Hesiod
for the worst, whatever they	sh...	please to say, they may
and Dr. Parnell, though I	sh...	take a further opportunity of
the success may prove, I	sh...	never repent of an undertaking
is thy daughter, priest, and	sh...	remain; And prayers, and tears

Figure 6. Collocations extracted through Voyant

5. Findings and Discussion

The digital stylistic analysis of *Homer's Iliad* using Voyant Tools provides both quantitative and interpretive insight into one of the most influential works of Western literature. The lexical, semantic, and contextual layers of the text, when transformed into data visualizations, reveal measurable patterns that reinforce long-standing critical observations while introducing new, data-driven perspectives.

Lexical findings show that repetition is the poem's central stylistic mechanism. Words such as *Achilles*, *Hector*, *war*, *god*, *arms*, and *fate* dominate the corpus, illustrating Homer's reliance on recurring diction to maintain rhythmic cohesion and oral memorability. The relatively low vocabulary density (0.072) and high readability index (10.0) indicate a deliberate use of repetition and formal structure consistent with an oral-formulaic tradition. These findings quantitatively validate Parry and Lord's theories, demonstrating how formulaic phrases construct both poetic rhythm and thematic unity.

Semantic analysis highlights interconnected fields of meaning centered on heroism, divinity, mortality, and honor. The collocational proximity of *Achilles* with *wrath*, *honor*, and *death*, and of *Hector* with *duty* and *fate*, illustrates the poem's moral dialectic between individual pride and communal responsibility. The repeated appearance of *Zeus*, *gods*, and *fate* situates human action within a divine framework, confirming that the *Iliad* continually negotiates between human will and cosmic determinism. Voyant's trend graphs visually trace these themes through the narrative's progression—from Achilles' withdrawal to his re-entry into battle—demonstrating how lexical recurrence parallels emotional and ethical evolution.

Contextual findings derived from the Trends and Collocation tools suggest a cyclical narrative rhythm. Peaks in the frequency of *Achilles* and *war* correspond to moments of heightened conflict, while increased mentions of *god* and *fate* accompany narrative transitions and moral reflection. This pattern supports the argument that the *Iliad*'s structure mirrors its philosophical tension: human valor repeatedly rises only to be subdued by divine will and inevitable loss. Collectively, these findings affirm that digital stylistics can enhance traditional philological analysis. By quantifying linguistic and thematic recurrences, Voyant Tools bridges classical interpretation and computational methodology. The visual data do not replace literary insight; instead, they *amplify* it—transforming qualitative impressions into verifiable trends. The digital approach clarifies how Homer's artistry relies on lexical density, semantic balance, and contextual rhythm to weave an enduring narrative of human emotion and divine power.

6. Conclusion

The findings of this study demonstrate that digital stylistics can substantially enrich Homeric scholarship by empirically substantiating the oral-formulaic and thematic patterns long observed by classical theorists. The lexical analysis confirms the density and recurrence of epic formulas that sustain the poem's rhythmic and mnemonic function, validating Parry and Lord's theories through quantifiable evidence. Semantic and trend analyses reveal how lexical clusters such as *Achilles–wrath* and *Hector–honor* evolve across the narrative, mapping emotional arcs and moral contrasts that define the poem's structure. Contextual analysis further clarifies the relationship between divine agency (*Zeus*, *fate*, *god*) and human valor, emphasizing how language encodes the interaction between mortality and immortality, pride and piety, vengeance and reconciliation.

By addressing the methodological gap in previous research, this study establishes a replicable model for computationally grounded classical analysis. It demonstrates that quantitative corpus methods can coexist with qualitative interpretation, offering a richer and more objective understanding of ancient texts. Beyond *The Iliad*, this hybrid framework can be extended to other epics such as the *Odyssey* and *Aeneid*, inviting a new paradigm in digital classical studies where technology, philology, and literary theory converge. Thus, the research not only validates Homeric scholarship through data but redefines how ancient literature can be studied in the digital age through bridging tradition and innovation, text and technology, meaning and measurement.

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