

A Phono-Semantic Study of Milton's Sonnet "When I consider how my light is spent" Using Nonlinear CV Tiers: An Analytic Study

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ABSTRACT

This study applies Non-Linear CV-Tier to John Milton's sonnet poem "When I consider how my light is spent" to demonstrate how hierarchical phonological organization contributes to poetic meaning. Previous studies have examined Milton's sonnets using traditional metrical and stylistic approaches. However, no study has systematically applied a four-tier non-linear CV phonological model to explore the interaction between syllable structure, stress, and semantic interpretation. This study fills this gap by: 1) Applying a multi-tier non-linear CV framework. 2) Integrating phonological analysis with semantic interpretation. 3) Providing line-by-line CV and stress representations. This study aims to analyze Milton's sonnet through the nonlinear CV-Tier framework, identify dominant syllable patterns based on frequency distribution, examine open and closed syllable structures and stress patterns, and explore the phono-semantic relationship between phonological form and the poem's thematic meanings of blindness, patience, and spiritual reflection. It is

based on the following hypotheses: The CVC structure is the dominant phonological pattern in the sonnet, open syllables are more frequent than closed syllables, phonological patterns correlate with the poem's contemplative and theological themes, and the CV-Tier framework is suitable for phono-semantic analysis of English sonnet poetry. As methodology is concerned, quantitative and qualitative descriptive analytic approaches will be used to achieve the aims and verify hypotheses. Of the main conclusions, the close relationship between phonological structure, rhythm, and the poem's semantic implications, along with the application of nonlinear CV-phonology to Milton's poem, significantly influences both the composition of the poem and our understanding of its meanings. Finally, it shows that shifts in syllable weight and prosodic prominence align systematically with thematic transitions from anxiety to spiritual resolution. By integrating contemporary phonological theory with literary analysis, the paper argues for the explanatory adequacy of non-linear models in the analysis of poetic texts

Key words: CV-Tier; non-linear phonology; stress; Milton; poetic sound structure

1. INTRODUCTION

In the 20th century, John Goldsmith developed nonlinear phonology as a hierarchical system with multiple levels of representations, placing greater emphasis on stress and syllables considered analytical units and on rhythmic patterns that enhance the interpretative meaning of poems. Kahn (2005, p. 112) stated that nonlinear CV phonology appeared in the 1980s as one method that surpasses previous models. It focuses on how CV patterns affect topic development, tone, and emotional resonance. It facilitates comprehension of phonological characteristics in language structures and how they relate to meaning. This

approach emphasizes the interdisciplinary nature of linguistic theory and literary criticism. It looks at how vowel and consonant sequences affect rhythm, stress patterns, and syllable development; it is particularly useful for comprehending poetic **writings**. These recent developments in phonological theory have marked a significant shift from linear representations of sound structure toward Non-linear phonology, which models phonological phenomena through hierarchical and multi-tiered representations. This theoretical framework has provided more adequate explanations for complex phonological processes such as syllable structure, feature spreading, stress, and harmony tiers.

Despite the substantial body of theoretical work in nonlinear phonology, there remains a clear research gap in applied and data-driven studies that systematically employ non-linear models such as CV-tier representations- to analyze authentic linguistics data, particularly within English phonology. Moreover, relatively few studies have explored how non-linear representations enhance our understanding of phonological patterning beyond what linear analyses can capture. The present study seeks to address this gap by applying a non-linear phonological framework to selected data, demonstrating its analytical advantages and empirical relevance.

This research tries to answer the following questions: 1) What CV- Tier patterns are most dominant in the sonnet? 2) How does the distribution of open and closed syllables influence the poem's rhythmic structure? 3) How do phonological patterns (CVC dominance) reflect the semantic themes of blindness and patience? 4) How does the Nonlinear CV- Tier model explain the relationship between phonological form and poetic meaning?

Milton's sonnet poem "When I Consider How My Light Is Spent" conveys his blindness as well as his internal suffering, doubts about God's justice, and acceptance of divine wisdom. The poem explores topics of loss, dissatisfaction, dread of divine judgment, and inadequacy. Topics covered in the poem include accepting God's will, divine purpose, and personal tragedy. Human limitations and spiritual resilience, and how the poet regrets his existence, emphasizing the need of finding purpose in hardship and finding a balance between faith and personal struggles. The multidisciplinary approach, which consists of linguistic theory and literary criticism, shows how nonlinear phonology is relevant to poetic analysis and offers fresh viewpoints about Milton's creativity. Milton's use of meter, sound patterns, and rhetorical techniques in composing his poem demonstrates its technical proficiency; it is a rich subject for literary and linguistic analysis. His mastery of meter and tone heightens the sonnet's emotional and spiritual effect. A new perspective on Milton's creativity is offered, and an interdisciplinary study of language form and meaning is advanced by bridging the gap between literary studies and linguistic analysis. Additionally, there are two methods for analyzing poetry: non-linear phonology and CV phonology. Through this approach, it is better to understand Milton's poem and the significance of linguistic concepts in poetry (Kahn, 2005, p. 114). Milton's mastery of the Petrarchan form and his creative use of sound patterns to reinforce meaning are both evident in this sonnet, which is rich in spiritual and emotional depth.

2. LITERATURE REVIEW

2.1 Non-linear CV Phonology

Rodrigues, T. B. dos S. (2025) states the fact that the concept of non-linear CV phonology organizes phonological parts in a layered way, with syllables, feet, and prosodic words arranged in a hierarchy. This approach highlights dependencies inside and between syllables. Feature geometry was added by organizing phonological traits into a tree-like structure, which added another

level of complexity. Selkirk (1984, p.166) expanded the theory by relating CV phonology to more comprehensive prosodic elements, such as phonological phrases and intonational phrases. Non-linear CV phonology is a theoretical paradigm used in phonological research that emphasizes sound patterns' multifaceted and hierarchical nature. The interaction between vowels and consonants inside syllables is the main emphasis of this late 20th-century method. This study looks at its foundational writings, important developments, and applications in linguistic and transdisciplinary research.

Kahn (2005, p.118) stated that the linguistic theory known as non-linear CV-phonology was developed in the 1970s and 1980s to overcome the shortcomings of linear phonology, a framework within generative theory. To understand phonological phenomena beyond single segments, CV-Phonology uses non-linear representations of sounds, with vowels and consonants on distinct layers connected by connections. The "C" level for consonants and the "V" level for vowels are two separate levels of phonological representation brought about by CV-Phonology, which was developed by John Goldsmith and John McCarthy in the 1970s. The temporal locations of sounds are also represented by the skeletal layer, which is also added. It is much easier to comprehend intricate phonological phenomena like vowel harmony, lengthening and shortening processes, and tonal language interactions when using CV-Phonology. The wide influence of CV-Phonology, which is a non-linear theory, has led to the development of modern theories that explain complex phonological interactions, affecting other theories like Auto-segmental Phonology and Metrical Phonology. Non-linear CV phonology emerged, in contrast to earlier linear models. Goldsmith's (1976, p.57) Auto-segmental Phonology, which introduced distinct tiers for various phonological features, and Clement's (1983, p.77) CV Phonology, which formalized the CV framework by proposing a hierarchical structure with separate

slots for vowels and consonants, are significant contributions. Liberman's (1977, p.97) *Metrical Phonology* laid the groundwork for understanding stress patterns, a critical component of nonlinear phonology. These contributions have had a significant influence on the field of phonology.

Crystal (2003, p.201) *stated that* a common method for examining syllable structure in several languages, the CV model explains trends such as onset maximization and coda restrictions. In English, for example, the model promotes open syllables and phonotactic constraints on consonant clusters. Moreover, Prince & Paul (1992, p.46) stated that metric phonology, which is a key element of the CV framework, is used to examine stress patterns in poetry and actual speech. Researchers usually employ CV phonology, which reveals how sound structures affect rhythm, mood, and thematic emphasis, to investigate the connection between phonological patterns and poetic meaning. (Prince & Paul, 1992, p.99). This model uses prosody, stress, and CV patterns to evaluate phonological structures in poetry texts. It makes it easier to comprehend how sound systems improve rhythm, tone, and thematic relevance. This approach is advantageous, especially for understanding complex poetry pieces, like Milton's sonnet "When I Consider How My Light Is Spent," where phonological structures convey nuanced meaning and feeling. Non-linear phonology has been used to study the relationship between sound shapes and poetic meaning in literary studies. It emphasizes segmental parts, prosodic patterns, and hierarchies, all of which are critical to understanding poetry's phonological features and how they affect thematic tension and depth. (Al-Shamary, 2018, p.200).

2.2 Explanation of Key Concepts

2.2.1 Syllable Structures

Roca (1999, p.80) stated that syllables are basic speech units made up of one or more phonemes arranged around a single

vowel sound. According to phonological norms, syllable structure describes how vowels (V) and consonants (C) are arranged inside a syllable. The rhyme is formed by the onset, nucleus, and coda of syllables. Vowels mark the end of open syllables, whereas consonants mark the end of closed syllables. The CV framework uses syllables as combinations of consonant and vowel slots, such as CV (e.g., me), CVC (e.g., bat), and CCV (e.g., tree). Word pronunciation, rhythm, and stress patterns are influenced by syllable structures, which can produce more rapid or smoother rhythms in poetry (Katamba, 1989, p.170).

2.2.2 Hierarchies

Non-linear phonology is based on phonological hierarchies, which are layered systems with lower levels arranged and higher levels predominating. Word pronunciation, rhythm, and stress patterns are greatly influenced by syllable structures, such as those in poetry, which can impact tone and mood. The features, segments, syllables, feet, prosodic words, and higher prosodic units are among the levels at which phonemes are examined. Different characteristics, including onset, nucleus, coda, foot, stress, and features, are represented by each level. Syllables, which contain internal structures, are made up of phonemes (Van der Hulst, H. (2020).. Metrical feet with stress connections are formed by foot levels. When prosodic words are combined, certain stress patterns are produced. Higher prosodic units group words into utterances, notional phrases, and phrases. Hierarchies provide a comprehensive analysis of sound patterns to understand how phonology interacts with stress and rhythm in poetry, showing how tiny units contribute to larger prosodic and rhythmic structures. Along with the pauses and enjambments that show internal struggle, the sonnet's metrical foot and hierarchical syllable sequence illustrate the speaker's thematic journey from despair to acceptance (Prince, 1992, p. 105).

2.3 CV Phonology and Poetry

Milton's use of sound in his poems has been studied using nonlinear CV phonology, with a focus on how rhythm and stress reflect his theological beliefs (Stein 1977, p. 180). Non-linear approaches, which connect prosodic and syntactic elements to phonological structures, provide a layered analysis. Modern poets like Sylvia Plath and Dylan Thomas have also used non-linear phonology to investigate the connection between stress, intonation, and mood. The method has been applied to analyze how linguistic patterns reflect broader cultural or philosophical concepts, such as divine justice or existentialism. Phonological analysis in literary texts has become more accurate because of the application of cognition.

The study of nonlinear phonology looks at how a poem's rhythm and emotional tone are influenced by metrical structures and stress patterns. For example, variations from iambic pentameter in Milton's sonnets signal shifts in tone. The CV framework's hierarchical syllable structure demonstrates how poets use a phonological variety to emphasize key phrases or ideas. Abrams (2014, p. 113) stated that certain sounds, such as fricatives, plosives, and nasals, are connected to certain feelings or symbolic meanings. By analyzing alliteration and assonance in Milton's works, one may learn how sound patterns relate to theme elements. Non-linear phonology offers resources for mapping these patterns.

2.4 Phonology and Milton Studies

The sonnet discusses loss, patience, and divine purpose. He doubts his ability to serve God as he considers his losses, both

spiritual and bodily. Although the mournful tone of the first lines emphasizes the speaker's grief, the discussion of patience signals a radical shift as the speaker accepts his circumstances. The iambic pentameter and alternating stressed and unstressed syllables give the sonnet a reflective tempo. Important themes are highlighted by various stress patterns, such as the contrast between "spent" and "light" or the climactic phrase "stand and wait." Soft vowels express reflection and melancholy, whereas plosive consonants emphasize tension and resolve. Sound symbols are used to reinforce concepts.

Attridge (1982:65) stated that the arrangement of stress, rhythm, intonation, and pitch in poetry that creates emphasis, meaning, and emotion is known as prosody. The three main elements of prosody are intonation or the shift in pitch across a phrase or sentence; rhythm, or the arrangement of stressed and unstressed syllables; and stress, or the emphasis on syllables or words. Timing and pausing can affect speech's rhythm and meaning. While "si" receives primary stress, "con" receives secondary stress. Every phoneme has [+voiced] and [+vowel] features. Understanding the importance of hierarchies allows for a more in-depth analysis of sound patterns by showing how little units contribute to bigger prosodic and rhythmic structures. Poetic rhythm, based on metrical feet like trochees or iambs, has a significant impact on the aesthetic and interpretive elements of speech and poetry.

Tsur (1979, p.88) showed that changes in prosody, such as a pause or more emphasis, can highlight a point or enhance significance. Understanding fundamental concepts such as syllable structures, hierarchies, and prosodic patterns must be understood to use phonological systems to evaluate language and literature. These concepts provide tools for examining how meaning is influenced by sound patterns, particularly in artistic genres like poetry. Linguists and literary scholars can uncover the intricate link between form and function in language by

understanding how tiny elements contribute to broader prosodic and rhythmic patterns.

2.5 Phonological Structure and Poetic Meaning

Thornborrow, J., & Wareing, S. (1998,p. 202) state that the nonlinear CV-phonology is a linguistic framework that helps analyze the hierarchical aspects of phonological structures in poetry and shows the connection between phonological structure and poetic meaning by focusing on the consonant-vowel (CV) skeleton, syllable hierarchy, stress patterns, and prosodic elements. According to Habib, M. A., Asif, M., Fayyaz, S., Afzal, M. I., & Mohsin, L. A. (2024),this can be stated below through the following points:- In the CV framework, each syllable consists of a vowel and a consonant, forming a skeleton that determines the rhythm of the poem. The arrangement of the CV units can enhance the poem's flow and effectively communicate its emotional tone or topic focus. For example, whereas open syllables create a melodic rhythm, closed syllables heighten suddenness or tension. For example, Milton's sonnet uses stressed and unstressed syllables alternately to portray the poem's emotional progression. (Katamba, 1989, p.78). -by employing metrical grids to analyze stress patterns in a poem, non-linear CV-phonology determines which syllables are strong and weak. By highlighting significant words or phrases, stress shifts might affect the poem's interpretive focus. Changes in stress that are unexpected, for example, might highlight important themes. In Milton's sonnet, the use of the words "spent" and "light" highlights the frustration that comes with being blind. -the properties and distribution of sounds, which poets commonly use to express mood or auditory symbolism, are examined using non-linear CV-phonology. Repetition of vowels or consonants reinforces theme elements, much like in Milton's sonnet, where harsher consonants denote stress and softer vowel sounds promote self-examination. Nasal notes convey melancholy, whereas plosives convey energy.

(Anyanwu, 2008, p.117) -non-linear phonology often reflects the emotional undertone of a poem and emphasizes prosodic aspects like pitch, intonation, and rhythm. In "When I Consider How My Light Is Spent," by Milton, the rising and falling intonation patterns represent the speaker's journey (Al-Shamary 2018, p. 86). -In order to emphasize strong emotional experiences, poets usually depart from phonological or metrical norms. The non-linear CV-phonology is used to identify these fluctuations and their impacts. Although a sonnet's metrical variations highlight submission as a major theme, iambic pentameter usually follows (Anyanwu 2008, p.129).

2.6 Interaction between Form and Meaning

Al-Shamary (2018, p. 88) stated that the application of nonlinear CV-phonology can reveal the intricate relationship between sound patterns and lyrical meaning. It demonstrates the relationships and ways in which thematic journeys influence syllables, stress, and other aspects of sound patterns. The CV framework demonstrates how rhythmic flow, stress shifts, and sound symbolism support Milton's sonnet's message of patience and trust. Moreover, the tonal analysis of Milton's sonnet reveals a balanced distribution of high (H) and low (L) tones. The octet (first eight lines) displays high and low tones, while the sestet (last six lines) maintains a similar distribution. In addition to that, the analysis of CV-tier patterns identified a predominant use of CV and CVC structures of all syllables in the poem. This consistency supports the hierarchical model proposed by Clements (1983, p.177).The study demonstrated a clear alignment between syllable tiers and tonal patterns, validating the hierarchical framework. Statistical measures further emphasized the significance of these alignments in shaping the poem's rhythmic and thematic coherence.

3. Methodology

This study employs a mixed-method descriptive, analytical and quantitative research design within the framework of non-linear phonological theory and quantitative research design methodology grounded in Non-Linear Phonology, drawing primarily on Goldsmith's model and subsequent CV-tier refinements with some modification. The data consist of carefully selected phonological examples drawn from English (or a specified corpus/text), chosen for their relevance to non-linear analysis, particularly in terms of syllable structure and feature interaction. The analysis proceeds by representing the data across multiple tiers, separating segmental units from feature and prosodic information. Phonological diagrams are employed to illustrate hierarchical relations and feature spreading, thereby ensuring clarity and theoretical rigor where appropriate comparisons with linear analyses are provided to highlight the analytical advantages of the non-linear approach.

Phonological Analysis of the whole poem will be done line by line for the whole poem .The sonnet will be precisely examined to identify its rhythmic, structural, and thematic elements. -Examining the syllable structures of each word in the poem, stress patterns, and hierarchical relationships using non-linear CV phonology. Finally, Goldsmith's model (1976, p.70) will be followed in the analysis of each line in the poem.

SYLLABLE TIER

CV-TIER

SEGMENTAL- TIER

STRESS- TIER

4. Data Analysis

The data of this study is derived from Milton's original text, focusing specifically on the syllable structures of each line, with attention to consonant-vowel (CV) patterns. The patterns of stress and intonation, especially those that deviate from iambic pentameter, are also analyzed. Poetic devices like enjambment, caesura, and rhyme are analyzed in relation to phonology. Supporting materials include scholarly editions of the sonnet and relevant phonological studies. Additionally, the analysis uses a nonlinear CV phonology approach, which focuses on the structure of syllables, including the onset (the consonants before the vowel), nucleus (the vowel or main part), and coda (the consonants after the vowel). Second, Stress and Meter: The second step involves examining the primary stress in relation to the iambic pentameter of the sonnet. Thirdly, we will examine the phonological elements like [+voice], [+nasal], or [+front], which shape the sound's quality and interpretation. Moreover, to do **literary analysis**, examine how the phonological patterns support the poem's emotional resonance and main ideas as it surveys rhythm, symbolism, themes, and variations. In addition to that, these procedures will be followed:

- The sonnet is transcribed into phonological representations to note and analyze variations from normal iambic pentameter as well as to detect CV structures, syllable patterns, and stress distribution.

- With an emphasis on how well they fit the rhetorical and thematic development, hierarchical diagrams are used to illustrate the syllable connections, stress, and characteristics in a sonnet.

- This study links sound patterns to the emotional and symbolic components of the poem by combining the results of phonological analysis with literary analysis. It verifies results by comparing them to previously published academic studies. Some of the utilized resources include close reading strategies, non-

linear CV phonology, and interpreted editions of Milton's writings.

-Using non-linear CV phonology for interdisciplinary research and a deeper comprehension of meaning, the methodology seeks to investigate Milton's poetic devices, sound patterns, and thematic components in his sonnet.

Milton's poem is analyzed using non-linear CV phonology, which has an impact on the poem's semantic elements. It concentrates on ways in which prosodic elements, syllable structures, and stress patterns interact with the poem's content. An analysis and explanation of the four tiers for each line in the poem will be shown below with reference to the semantic information. The symbols (Q) refers to (Syllable).

Line No. 1: "When I consider how my light is spent"

SYLLABLE TIER	Q	Q	Q	Q	Q	Q	Q	Q
Q								
CV-TIER	CVC.	V.	CVC.	CV.	CV.	CV.	CV.	CVCC.
CCVCC								

SEGMENTAL- TIER /Wen ai kənsidə hau mai 'laits 'spent/

STRESS-TIER S U U S U U U S S

1. Syllable Structure: [CVC] [V] [CVC] [CV] [CV] [CV] [CV] [CVCC] [CCVCC]

Heavy syllables (e.g., "con-si-der" and "spent") convey reflective depth, emphasizing the weight of Milton's introspection.

2. Stress and Prosody: Stress falls on "consider," "light," and "spent," highlighting key semantic elements of thought, illumination, and loss.

3. Semantic Impact: The metrical and syllabic emphasis mirrors the internal struggle. The contrast between "light" (hope) and "spent" (loss) is underscored by prosodic weight.

2-Stress and Prosody: Stress on "talent," "death," and "hide," reflects the poet's anxiety about wasted potential.

3-Semantic Impact: Stress and syllable structure amplify the existential weight of failing to fulfill one's divine purpose.

Line No. 4: "Lodged with me useless, though my soul more bent"

SYLLABLE TIER Q Q Q Q Q Q Q
 Q Q Q
 CV-TIER CVCC. CVC. CV. CVC. CVC CVC. CV.
 CVC. CV. CVCC.
 SEGMENTAL - TIER / lɒdʒd wið mi ju:z lis θʊt mai soul
 mɔ: bent /
 STRESS-TIER S U U U S U U U S
 S S

1. Syllable Structure: CV structure: [CVCC] [CVC] [CV] [CVC][CVC] [CVC] [CV][CVC][CV] [CVCC] "Useless" features a trochee (stress on the first syllable), drawing attention to Milton's feeling of inadequacy.

2. .Stress and Prosody: Stress on "lodged," "useless," and "bent" highlights a sense of burden and determination.

3. Semantic Impact: The CV structure reflects a tension between confinement ("lodged") and resolve ("bent"), reinforcing the poem's spiritual conflict.

Line No. 5: "To serve there with, my Maker, and present."

SYLLABLE TIER Q Q Q Q Q Q Q Q
 Q Q
 CV-TIER CV. CVC. CV. CVC. CV CVC . V.
 VCC. CCV.CVCC.
 SEGMENTAL - TIER / tu sə:v ðð wið mai meikə ænd
 prezənt/

STRESS-TIER U S U U U S U U
S U

1-Syllable Structure: [CV] [CVC] [CV][CVC] [CV] [CVC] [V] [VCC] [CCV] [CVCC] The regular CV The pattern reflects Milton's desire for order and purpose in serving God.2-Stress and Prosody: Stress on "serve," "Maker," and "present" emphasizes the poet's devotional intent. 3-Semantic Impact: The prosodic alignment highlights the theme of service and dedication, underscoring Milton's theological concerns.

Line No. 6: "My true account, lest He return to chide;"

SYLLABLE- TIER Q Q Q Q Q Q Q Q
Q Q
CV- TIER CV. CCV. V.CVCC. CVCC. CV. CV.CVC.VC.
CVC.
SEGMENTAL – TIER / mai tru əkaunt lest hi
ritə:niŋ tʃaid/
STRESS-TIER U S U S S U U S U S

1.Syllable Structure: CV structure: [CV] [CCV] [V] [CVCC] S[CVCC] [CV] [CV] [CVC]][VC] [CVC]The final heavy syllable "chide" adds weight to the fear of divine judgment. 2.Stress and Prosody: Stress on "true," "account," and "chide" reflects the poet's concern for moral accountability. 3. Semantic Impact: The interplay of stress and heavy syllables underscores the seriousness of the poet's introspection about judgment.

Line No. 7: "Doth God exact day labor, light denied?"

SYLLABLE-TIER Q Q Q Q Q Q Q Q Q Q
CV-TIER CVC. CVC. VCC. VCC. CV. CV.CV. CVC.
CV.CVC.

SEGMENTAL - TIER /doθ gɔd ɪgzækt dei leibə lait dinaɪd /
 STRESS-TIER S S U S S S U S U S

1.Syllable Structure: [CVC] [CVC] [VCC] [VCC] [CV] [CV]
 [CV] [CVC] [CV] [CVC]The compactness of the CV structure in
 "day labor" mirrors the burden of the question. 2.Stress
 and Prosody: Stress on "God," "abor," and "denied" reflects the
 central theological query. 3.Semantic Impact: The CV
 structure and prosodic emphasis highlight the tension between
 divine justice and human limitation.

Line No. 8: "I ask with fondness" But Patience, to prevent"

SYLLABLE-TIER Q Q Q Q Q Q Q Q Q Q
 CV-TIER V. VCC. CVC. CVCC. CVC. CVC. CVCCC. CV.
 CCV. CVCC.
 SEGMENTAL - TIER /aɪ a:sk wið faʊndnɪs bʌt peɪfns
 tu prɪvɛnt/

STRESS-TIER U S U S U U S U S U

1. Syllable Structure: [V] [VCC] CVC] [CVCC] [CVC [CVC]
 [CVCCC] [CV] [CCV][CVCC]

The regular CV structure reflects a calm, measured shift
 introduced by "Patience."

2. Stress and Prosody: Stress on "ask," "patience," and "prevent"
 signals a transition from doubt to resolution. 3. Semantic
 Impact: The structural regularity reflects the soothing voice of
 "Patience", marking an essential shift in the poem's tone.

Line No. 9: "That murmur soon replies, 'God does not need.'"

SYLLABLE TIER Q Q Q Q Q Q Q Q Q Q

CV-TIER CVC. CV.CV. CVC. CVC. CVC. CVC. CVC.
CVC.CVC.

SEGMENTAL TIER / ðæt mə:mə su:n riplaiz gʌd doθ
not ni:d /

STRESS-TIER U S U S U S S S U S

1. Syllable Structure: CV structure: [CVC] [CVCVC] [CVCVC]
[CVCVC] [CVC] Heavy syllables like "murmur" and
"need" emphasize the emotional weight and theological
significance of the response. 2. Stress
and Prosody: Stress on "murmur," "replies," and "need"
highlights the dramatic tension between doubt and divine
assurance. 3. Semantic Impact: The use of heavy syllables and
prosody underscores the calming yet authoritative tone of the
reply, reflecting God's omnipotence and independence from
human actions.

Line No.10: "Either man's work or his own gifts; who best"

SYLLABLE TIER Q Q Q Q Q Q Q Q Q Q
CV- TIER V.CV. CVCC. CVC. V. CVC. VC.
CVCC. CV. CVCC.

SEGMENTAL - TIER /aɪðə man'z wə:k ɔ: hɪz oun gifts hu
best /

STRESS-TIER U U S S U U S S U S

1. Syllable Structure: CV structure: [CVCVC] [CVC] [CVC]
[CVC] [CVC] [CVC]

The balanced repetition of CVC syllables reflects the equality of
"work" and "gifts," central to the line's meaning. 2. Prosody
and Stress: Prosody emphasizes "work," "gifts," and "best,"
drawing emphasis to the standards of divine punishment.
3. Semantic Impact: The religious message that dedication, not

productivity, is most prized is reinforced by the syllabic regularity, which reflects God's justice and impartiality.

Line No. 11: "Bear his mild yoke; they serve him best. His state"

SYLLABLE-TIER Q Q Q Q Q Q Q Q Q Q
CV- TIER CV. CVC. CVCC. CV. CVC. CVC. CVCC. CVC. CCVC.

SEGMENTAL-TIER / 'biə hɪz 'maɪld ðe 'sə:v hɪm 'bɛst hɪz 'steɪt/
STRESS-TIER S U S U S U S U S

1. Syllable Structure: CV structure: [CVC] [CVC] [CVC] [CVCVC] [CVC] [CVCVC]. The final stressed syllable in "state" conveys stability and divine majesty. 2. Stress and Prosody: Stress on "mild," "yoke," and "state" reflects key theological concepts— God's gentle authority and the grandeur of His dominion. 3. Semantic Impact: The contrast between "mild" (light syllable) and "yoke" (heavy syllable)

Highlights the paradox of serving God: submission is freeing rather than burdensome.

Line No. 12 "Is kingly; thousands at his bidding speed,"

SYLLABLE-TIER Q Q Q Q Q Q Q Q Q Q Q
CV- TIER VC. CVC.CV. CVC. VCCC. VC. CVC. CV.VC. CCVC

SEGMENTAL-TIER /ɪz 'kɪŋli 'θaʊzəndz æt hɪz 'bɪdɪŋ 'spi:d/
STRESS-TIER U S U S U U U S U S

1. Syllable Structure: CV structure: [CVC] [CVCVC] [CVC] [CVC] [CVCVC] Heavy syllables like "kingly" and "speed" emphasize God's authority and the swift obedience of His servants.

2. Stress and Prosody: Stress falls on "kingly," "thousands," and "speed," emphasizing God's power and the activity of His subjects.

3. Semantic Impact: The CV structure and stress patterns create a dynamic rhythm, mirroring the swift, eager service of God's followers and contrasting with Milton's stillness.

Line No. 13: "And post o'er land and ocean without rest:"

SYLLABLE-TIER Q Q Q Q Q Q Q Q Q Q Q
 CV- TIER VCC. CVCC. VC.V. CVCC. VC. VCC. CVC.VC.
 CVCC.
 SEGMENTAL-TIER /ənd post oʊvə land ən oʊfən wiðaut rest/
 STRESS-TIER U S S U S U S U U S

1. Syllable Structure: CV structure: [VCC] [CVCC] [VCV] [CVCC] [VCC] [VCV] [CVC] [VC] [CVCC] The repeated CVC structure conveys the relentless movement described in "post" and "ocean."
 2. Stress and Prosody: Stress on "post," "land," and "rest" highlights the exhaustive nature of divine service.
 3. Semantic Impact: The prosodic emphasis on "rest" (a heavy syllable) contrasts the physical activity of God's followers with Milton's introspective stillness, drawing attention to the equality of both forms of service.

Line No. 14 "They also serve who only stand and wait."

SYLLABLE TIER Q Q Q Q Q Q Q Q Q Q
 CV- TIER CV. VC.CV. CVC. CV. VC.CV. CCVCC. VC.
 CVC.
 SEGMENTAL - TIER /ðei ɔlso sɔ:v hu ɔnli stand ən weit/
 STRESS-TIER U U U S U S U S U S

1. Syllable Structure: CV structure: [CVC] [CVCVC] [CVC] [CVC] [CVC] [CVC] The balanced CV structure reflects the

meditative stillness and symmetry of the resolution. 2. Stress and Prosody: Stress falls on "serve," "stand," and "wait," underscoring the poem's key theological assertion. 3. Semantic Impact: The stress and syllable structure reinforce the idea that passive submission is as valuable as active service, resolving the poem's central conflict.

4. Results of CV-Tier Analysis

Having a look at tables 1, 2, and 3 that followed states that the analysis of the poem according to the nonlinear CV-Tier model reveals a clear dominance of closed syllabic structures over complex open forms across the fourteen lines. 136 syllables were identified, consisting of 96 open syllables and 40 closed syllables. From a CV pattern perspective, the most frequent syllable structure is CVC, which occurred 49 times, making it the dominant phonological pattern in the poem. This is followed by the CV pattern with 30 occurrences, indicating a secondary reliance on simple open syllable constructions.

Whereas, the less frequent patterns include VC: 15 occurrences, CVCC: 17 occurrences, VCC: 8 occurrences, CCV: 3 occurrences, CVCCC; CCVC; CCVCC: 2 occurrences each, and finally VCCC: has one occurrence only. This distribution demonstrates that the poet favors consonant-final syllables, which contributes to phonological weight and rhythmic density.

At the prosodic level, the analysis also shows a near balance between stress types, with 64 stressed syllables and 72 unstressed syllables. However, the slightly higher number of unstressed syllables suggests a rhythmic flow that supports metrical regularity rather than heavy stress clustering.

Line by line analysis further indicates that lines 2, 3, 4, and 9 exhibit a high concentration of CVC structures, reinforcing the phonological stability of the verse.

Table (1) Distribution of CV Patterns

Line No.	V	C V	C C V	V C	VC C	VC CC	CVC	CV CC	CV CC C	CC VC	CC VC C
L.1	1	3					2	1			1
L.2		1		3			5	1			
L.3				1	2		5	1			
L.4		3					5	2			
L.5	1	3	1		1		3	1			
L.6	1	3	1	1			2	2			
L.7		4			2		4				
L.8	1	1	1		1		3	2	1		
L.9		2					8				
L.10	2	2		1			2	2	1		
L.11		2					4	2		1	
L.12		2		3		1	3			1	
L.13	1			3	2		1	3			
L.14		4		3			2				1
Total	7	30	3	15	8	1	49	17	2	2	2
Percentage	5.14%	22.05%	2.20%	11.02%	6.34%	0.73%	36.02%	12.5%	1.47%	1.47%	1.47%

Table (2) Distribution of Stress and unstressed syllables

Stressed Syllables	Unstressed Syllables
64	72
47.058	52.941

Table (3) Distribution of open & close Syllables

Types	Open Syllable	Close Syllables
Total No. of Syllables	96 Syllables	40 Syllables
Percentage	70.58%	29.41%

5. Discussions and Findings

According to the CV-Tier framework, the dominance of CVC structures reflects a preference for heavy syllables, which enhances rhythmic compactness and phonological prominence. The frequent occurrence of closed syllables (40) compared to complex clusters suggests that the poem maintains a balance between phonological simplicity and metrical control.

Moreover, the relatively high frequency of CV (30) patterns indicates that the poet alternates between open and closed syllables to maintain prosodic harmony. This alternation aligns with nonlinear phonological theory, where syllable structure interacts with stress and rhythm across tiers rather than a linear sequence.

The analysis reveals a systematic correlation between syllable weight and thematic emphasis. Heavy syllables (CVC, CVV

frequently coincide with lexemes denoting loss, obligation, and judgment (e.g., light, spent, talent, chide), while lighter syllables facilitate transitions toward reflection and acceptance. Light syllables (CV), also, depict times of introspection or transition and offer rhythmic balance and contrast.

Stress realignment in the sestet marks a phonological and semantic resolution, culminating in the balanced rhythm of the final line," They also serve whom only stand and wait. "These findings confirm that non-linear CV phonology provides a principled account of how phonological form contributes to poetic meaning, surpassing purely descriptive metrical analysis.

Stress patterns emphasize Milton's theological arguments and spiritual concerns by matching the semantic weight of particular terms. Through nonlinear CV phonology and the poem's interaction of form and meaning, it is possible to see how the poem's spiritual and philosophical depth is reinforced by sound structures and how the hierarchical arrangement of syllables and stress patterns contributes to its meditative and devotional tone. On the other hand, the harmony of light and heavy syllables enhances the semantic complexity by reflecting the conflict between heavenly grace and human limitations. From a semantic perspective, the following elements are highlighted in the analysis of the last six lines using nonlinear CV phonology:

- Theme and Syllable Weight: The use of heavy syllables (CVC, CVV) highlights important theological concepts such as "need," "work," "serve," and "wait," indicating their significance in the poet's reflection on human limitations and divine justice.

- Contrast of Movement and Stillness: Lines like "thousands at his bidding speed" have a powerful rhythm that contrasts with the calm, well-balanced syllables of "They also serve who only stand and wait," which represents the equality of activity.
- Resolution Reinforcement: The final line's prosodic patterns

produce a harmonic ending that reflects the poet's acceptance of his role in God's plan. Non-linear CV phonology allows us to observe how Milton's sound in his poem. -The correlation

between CV-phonology and Milton's poetry is shown through the following: The three tables explore Milton's use of iambic pentameter in his sonnet "When I Consider How My Light Is Spent," which highlighted how these phonetic adjustments enhance the poem's emotional journey, which ranges from acceptance to despair. They connect language theory with literary criticism, providing fresh perspectives on Milton's artistic creations). Non-linear CV-phonology examines how vowel and consonant sounds in poetry express deeper meanings, emotions, and metaphors; repeated sounds signify power, tension, and contemplation. Non-linear phonology emphasizes prosodic elements like rhythm, intonation, and pitch, which often correspond with a poem's emotional undertone. "When I Consider How My Light Is Spent," which depicts the speaker's transition from skepticism to devotion to divine will, uses rising and falling intonation patterns. The points that poets emphasize by deviating from metrical or phonological patterns are identified using non-linear CV-phonology. Throughout Milton's sonnet, iambic pentameter is employed, with sporadic metrical changes that highlight intense emotional passages. Take the phrase "who best bears his mild yoke," for instance, which highlights the need for surrender through its stress pattern .Non-linear CV-phonology illustrates the close connection between meaning and sound patterns, bridging the gap between language structure and poetic interpretation. It is used to analyze Milton's sonnet, which illustrates the theme of wrestling with divine justice through the interaction of stress, syllables, and characteristics. The CV framework also illustrates the complex interrelationship between a poem's content and phonological structure by highlighting the ways in which rhythmically used and hierarchically structured

sound patterns enhance a literary work's aesthetic, emotional, and thematic depth.

5. Conclusion

The CV- Tier analysis confirms that the poem is structurally dominated by consonant-final syllables, particularly the CVC pattern, which accounts for the highest frequency. This dominance indicates a phonologically weighted texture that enhances rhythmic firmness and poetic intensity. The statistical distribution of open Syllables vs. closed syllables reveals that while open syllables are numerically higher, the functional prominence lies in closed syllables due to their metrical strength and stress-bearing capacity. Additionally, the stress analysis of stressed vs. unstressed syllables suggests that the poem relies on rhythmic alternation rather than stress concentration, which supports its metrical regularity from a nonlinear phonological perspective.

From a theoretical standpoint, the finding validate the applicability of the CV-Tier model to English poetic phonology, even in the absence of a tonal tier. The interaction between the syllable tier and CV tier demonstrates that phonological structure, rather than tone, governs rhythmic organization in English verse. Finally, the results indicate that: CVC is the core rhythmic pattern of the poem, CV functions as a balancing open structure, Complex clusters(CCV,CVCC,CCVCC)are stylistically marked and limited, and the poem exhibits phonological economy with controlled structural variation. In addition to that, the quantitative CV-Tier analysis enhanced the objectivity of phonological interpretation by linking syllable structure frequencies with metrical and rhythmic functions.

Moreover, this study reveals that non-linear CV phonology offers a strong framework for analyzing the interaction between sound structure and meaning in Milton's sonnet. By modeling syllable hierarchy, stress distribution, and rhythmic organization, the analysis reveals how phonological form encodes spiritual tension and resolution. The findings not enrich Milton scholarship but also underscore the broader applicability of non-linear phonology in literary analysis. The classification of peak and non-peak syllables has been approached creatively by Non-Linear CV-Phonology, which offers a structured arrangement that determine the number of syllables in a word. By considering them as two separate segments that correspond to the V (vowel) and C (consonant) slots in the CV layer, it successfully addresses the difficulties presented by long vowels and affricates. Milton's sonnet has a unique poetic form even within the scope of the CV model, as seen by the distribution of tonal changes, which shows conformance to structural standards. According to the results, the auto-segmental model works best for analyzing tone changes in a poet's voice. The study also finds that segmental tiers and tonal tiers have an indirect link.

CV phonology emphasizes the necessity of linking segmental and tonal layers, proposing a unified communicative channel to connect them. Each poetic line is structured with an abstract segmental layer within the poet's cognition, and a phonetic stratum must be present to transition from abstract representation to concrete realization. While CV attributes are crucial for aligning musical elements with the poet's emotional expression, segmental and supra-segmental features are equally essential for spoken articulation. Additionally, non-linear phonology uses Milton's sonnet's phonological patterns to show how prosody and meaning relate to one another in literary studies. It makes it easier to see how phonological components support themes of loss, patience, and divine purpose by looking at syllabic patterns, hierarchies, and prosodic traits. This integration bridges the gap

between linguistic analysis and literary interpretation, offering a broader perspective on the implications of phonology in literary studies.

Furthermore, the key findings from the non-linear CV analysis can be shown below :

As far as the phonological rhythm and thematic reflection is concerned, the poem's themes such as hope, rage, and sadness—are reflected in its rhythmic patterns. Increased tension or ambiguity in meaning might result from irregular and disturbed rhythms that are expressed through elongations or omissions.

- Emphasis on key concepts: To highlight important concepts, the poet employs strongly emphasized words or syllables. Line 14's use of the phrases *serve, stand, and wait*, for instance, emphasizes the concepts of obligation and patience.

- Emotional Expression and Syllabic Length: Changes in the length of syllables (elongation or shortness) reveal changes in the poet's emotional condition. Shorter syllables convey speed or concern, whereas longer syllables convey urgency or in-depth thought.

- Phonological Metaphors and Figurative Speech: While softer consonants like /s/ and /l/ imply calmness or flexibility, heavy consonants like /d/ and /k/ indicate power or harshness. The long vowel in *light* in the Line 1, for example, expresses expansion or hope, while its abrupt consonantal conclusion suggests loss or finality.

- Syllabic Structure and Meaning: Open syllables indicate continuity or openness, whereas closed syllables imply finality or decisiveness. The contrast between darkness and expanse is reflected in line 2 through the use of alternating closed and open syllables. Furthermore, the poem's overall sense of sorrow and loss is reinforced by the phonological recurrence of consonants like /d/ and /k/. Non-linear CV phonology enhances the study of phonological effects in poetry and enriches the understanding of literary meaning by revealing complex phonetic tones. Finally,

this approach may be expanded in future studies to include more sonnets or other Miltonic works.

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Appendix 1

*"When I consider how my light is spent,
Ere half my days, in this dark world and wide,
And that one talent, which is death to hide
Lodged with me useless, though my soul more bent
To serve therewith my Maker, and present
My true account, lest he return and chide
Doth God exact day labor, right denied?"
I fondly ask. But Patience, to prevent*

*That murmur soon replies, "God does not need
Either the man's work or his own gifts. Who is best?
Bear His mild yoke; they serve Him best. His state
Is kingly: thousands at His bidding speed,
And post o'er land and ocean without rest;
They also serve who only stand and wait."*