

УДК 81'342

ВНУТРІШНЯ ПРОСОДІЯ В МОВЧАЗНОМУ ЧИТАННІ ПОЕЗІЇ: РОЛЬ СУБВОКАЛІЗАЦІЇ ТА УЯВНОГО ГОЛОСУ

Василенко Єлизавета Василівна

Студентка 6 курсу Факультету романо-германської філології

Київський Столичний Університет імені Бориса Грінченка

yvvasylenko.frgf24m@kubg.edu.ua

INNER PROSODY IN SILENT POETRY READING: THE ROLE OF SUBVOCALISATION AND IMAGINED VOICE

Vasylenko Yelyzaveta Vasylivna

6th year student of the Faculty of Romance and Germanic Philology

Borys Grinchenko Kyiv Metropolitan University

yvvasylenko.frgf24m@kubg.edu.ua

У статті досліджується явище внутрішньої просодії під час читання поезії мовчки, зосереджуючись на ролі субвокалізації, інтонації та емоційного залучення. Метою цього дослідження є визначення як різні типи читання поезії впливають на реакцію читача. Теоретичне підґрунтя поєднує знання з психолінгвістики, когнітивної поезії та теорії відгуку читача, підкреслюючи, що значення виникає під час взаємодії між текстом та читачем. Емпірична частина базується на експерименті, що включав в себе дві групи студентів, які опрацьовували один і той самий вірш різними способами. Учасники заповнювали анкети, створені для оцінки емоційного залучення та внутрішньої просодії за допомогою шкал оцінювання та відкритих відповідей. Результати показали, що прослуховування вірша у виконанні поета викликає сильніший емоційний зв'язок та посилює уявні звукові патерни вірша. Послідовні закономірності у відповідях свідчать про те, що слуховий вхід посилює внутрішню просодію читача та поглиблює особистий досвід поезії. Ці результати свідчать про те, що читання мовчки насправді не є мовчазним – воно активує фонологічну уяву та задіює слухову пам'ять. Таким чином, поезія функціонує як мультимодальний когнітивний акт, де ритм в звук зберігаються внутрішньо, навіть за відсутності зовнішнього мовлення, перетворюючи процес читання мовчки на інтимний діалог між поетичним текстом та внутрішнім вухом читача.

Ключові слова: внутрішня просодія, читання мовчки, субвокалізація, уявний голос, емоційний відгук, залученість читача, поетичне сприйняття.

The article explores the phenomenon of inner prosody during silent poem reading, focusing on the role of subvocalisation, intonation and emotional engagement. The aim of this study is to define how different modes of poetry acquisition influence the reader's response. The theoretical background combines knowledge from psycholinguistics, cognitive poetry and the reader's response theory, highlighting that the meaning emerges through the interaction between text and reader. The empirical part is based on an experiment that includes two groups of students processing the same poem in different ways. Participants filled in the questionnaires designed to evaluate emotional engagement and inner prosody with the help of evaluation scales and open-ended responses. Results revealed that listening to the poet's performance evokes a stronger emotional connection and enhances the imagined sound patterns of the poem. Consistent patterns across responses indicate

that the auditory input enhanced the inner prosody of the reader and deepened the personal experience of the poetry. These results suggest that silent reading is not really silent – it activates phonological imagination and engages auditory memory. In this way, poetry functions as a multimodal cognitive act where rhythm and sound are saved internally even in the absence of external speech, turning the process of silent reading into an intimate dialogue between poetic text and the reader's inner ear.

Key words: *inner prosody, silent reading, subvocalisation, imagined voice, emotional response, reader engagement, poetic perception.*

Introduction: The traditional connection between poetry and oral delivery exists through the transformation of written words into physical experiences through rhythm and intonation. This raises a paradox: how does a genre that depends so heavily on sound continue to function when the voice is absent? The thing is that silent reading is never entirely “silent,” but instead activates inner prosody – mental simulations of rhythm, stress, and intonation that accompany the act of reading without vocalisation. The process of subvocalization or imagined voice enables readers to retain phonological elements of poetry even when they do not produce actual sounds.

Theoretical Background: Researchers explore how prosodic representations affect silent reading, demonstrating that they influence not only comprehension but also affective and aesthetic response. To this end, Yao (2021) demonstrates with his experimental studies that readers mentally reproduce prosodic elements during silent reading, and these phonological simulations determine their interpretation of direct and indirect speech. Surface electromyography studies by Nalborczyk et al. (2020) demonstrate through physiological data that inner speech produces covert articulatory movements, which support the theory that subvocalization and inner articulation occur during silent reading for particular readers. The research by Obermeier et al. (2016) demonstrates through ERP and behavioural results that verse prosody elements, including meter and rhyme patterns, enhance understanding and create a stronger aesthetic appeal, which shows that prosody affects emotional and aesthetic responses during silent text experience. It remains unclear whether silent poetry reading activates inner prosody in ways that influence comprehension, emotion, and aesthetic engagement, making the experience of reading poetry “silent” only in a physical sense but not in a cognitive one.

Inner prosody and subvocalisation help readers to understand their mental process of creating poetic meaning during silent reading. Inner prosody can also be determined as the mental simulation of intonation, rhythm and stress which silently accompanies written words. Unlike purely visual decoding, it involves an imagined auditory dimension, where readers can internally hear their own cadence and voice. Subvocalization, closely related but distinct, refers to covert articulation processes linked to the phonological loop of working. These two phenomena show that silent reading requires active participation since it combines physical and sensory elements.

Readers naturally process stress patterns and rhythmic structures during silent reading. Studies on metricity and rhythm tracking show that readers maintain awareness of prosodic patterns even when reading silently because they perform internal rhythm processing. The study by Blohm S. et al. (2019) uses eye-tracking to show that poetic rhythm affects how long readers focus on specific parts of text, which proves that silent readers naturally process rhythmic patterns.

Another key component of how readers react to poetry is auditory imagery. It enhances immersion and memory during silent reading by supplying tonal qualities which the printed text can't carry alone. In poetry, where sound patterns often have affective and semantic meaning, this is of significant importance. Neurocognitive studies confirm that auditory cortices and visual word form

areas are involved in silent reading, and they play a role of imagined sound. Therefore, inner prosody is an important component of literary experience rather than a secondary result of phonological decoding.

Prosodic processing was also connected to the emotional colouring of silent reading. It was shown that metrical pattern and rhythmic regularity significantly contribute to the emotional interaction of readers with poetic texts. It aligns with psycholinguistic theories, which suggest that rhythm is a non-semantic signal which amplifies affective meaning. Besides that, eye-movement data from Jacobs (2015) show that readers spend more time on rhythmic disruptions processing, correlating prosodic irregularities with heightened affective reactions and interpretative revisions. All these findings together highlight that inner prosody serves as an emotional filter, regulating subjective reactions outside semantic interpretation.

Reader response theory emphasises that the meaning is created in interaction between text and reader, as stated by Spirovska (2019). Inner prosody is an example of this transactional process: when readers imitate rhythm, intonation or stress in their minds, they co-create interpretative pathways. A reader's choice to hear a line, for example, as melancholic rather than as upbeat is partially dependent on prosodic enactment, and inner prosody is thus a vehicle of subjective interpretation.

Reading poetry is something that is not only a visual activity but an intrinsically auditory and embodied practice. Reader testimony and experiment-based studies consistently demonstrate that subjects will routinely access a mode of "hearing" an internalised voice when they access verse, and this suggests that internal prosody is a central reception procedure rather than a chance by-product. These findings therefore elucidate how silent reading engages the auditory and motor systems and how it constructs less than just understanding, including affective engagement.

Obermeier et al. (2016) claim that rhythmical regularity fosters fluency and further augments aesthetic enjoyment when reading silently, suggesting that metrical structures are processed as embodied rhythm patterns even without speech output. Correspondingly, rhythmical rhyme patterns create phonological expectations and strengthen the probability of covert speech production. Interference such as enjambment and caesura further evidence silent reading as an auditory activity: unexpected pauses or line breaks elevate fixation time and reorient attention, which shows that readers verbally simulate pauses as if they would listen instead of only reading from written text.

In addition to structural characteristics, the function of auditory imagery is core to the reader's experience. Alderson-Day and Fernyhough (2015) characterise inner voice as a core type of mental imagery that integrates phonological simulation with individual affective associations. This perspective helps explain why readers so often report experiencing neutral rhythm but indeed hearing a voice of specific tone, timbre, or feeling when they silently read poetry. Simultaneously, entrenched prosody of poetic speech acts upon cognitive processing as well as affective impact in silent reading to affirm intended soundscapes of imagination, and has considerable interpretive weight.

The implications of these findings extend across multiple applied contexts. In pedagogical poetry, Bloemert et al. (2019) demonstrate that students who engage in silent rhythm and prosody in foreign language classes achieve greater involvement and interpretative richness. It highlights that teaching methods should clearly acknowledge the inner voice as a resource and not consider it as a distracting factor.

Meter, rhyme, enjambment and caesura are not just descriptive information on the page but stimuli, which mobilise inner speech and auditory imagination. Readers, even in silence, become performers of oral text in their minds, producing a personally intimate version of the poem's rhythm and voice. This confluence of cognitive science, literary theory, and teaching confirms that silent

poetry reading is a multisensory act that bridges the visual and auditory, the cognitive and emotional, the individual and the cultural.

Case Study: To verify whether auditory exposure to a poet's voice enhances emotional engagement and the activation of inner prosody during silent poetry reading, we conducted an experiment, which involved two groups of students with an Intermediate level of English. Group 1 (10 participants) listened to the video recording of the famous American author Robert Frost reading his poem "Stopping by Woods on a Snowy Evening", while Group 2 (10 participants) read the same poem silently once. The initial hypothesis (H1) claimed that listening to poetry enhances emotional engagement and imagery vividness and aesthetic evaluation due to prosodic and auditory cues, while silent reading enhances comprehension and imagery vividness because of cognitive involvement. No participant acknowledged the poem in both modes. In this study, several dependent variables were studied, including the level of comprehension, emotional engagement, imagery vividness, aesthetic evaluation and memorability. After reading or listening to the poem, questionnaires were given to the participants. The questionnaires were different for both groups and included ten items evaluated on a five-point Likert scale and two open-ended questions about the emotions and imagery the poem evoked. For each response option (for example, strongly, moderately, slightly) was assigned a frequency value based on how many participants chose it (in percent). An independent variable was a mode of presentation (listening or reading silently).

After collecting the participants' responses from both groups, the data was quantitatively processed to identify the main emotional and perceptual tendencies. The answers were first grouped by categories of questions (emotional intensity, type of emotion, the feeling of the author's presence and activation of inner voice). Such proportional representation allowed for clear comparison between listening presentation and silent reading. The analysis focused on identifying dominant emotional trends, the degree of engagement and frequency of inner voice references. Besides that, qualitative notes from open-ended questions were examined for giving to support quantitative findings, which highlight exact words and sayings participants used to describe their emotional state. Together, these methods provided a balanced view on quantitative distribution and subjective interpretation, helping to evaluate how listening and silent reading experiences differ from the point of view of emotional resonance and imagined voice involvement.

The data revealed some interesting insights. Those participants who listened to the poem (Group 1) reported higher emotional engagement, often mentioning the influence of intonation, rhythm and voice expression on their perception. 85% of listeners described this experience as emotionally charged or nostalgic. However, only 40% of them demonstrated a clear and detailed understanding of the poem's meaning in further comprehension questions. In contrast, participants who read the poem silently (Group 2) reached a higher level of comprehension (75%), often providing analytical interpretations and demonstrating the knowledge of metaphorical language. Yet, only 45% participants from this group were informed about strong emotional reactions, and some of them described this experience as "intellectually impressive but less immersive".

Although the study was exploratory and conducted on a relatively small sample, some interesting tendencies were found. The group which listened to the poem reported higher general emotional intensity: 70% of listeners described their reaction as moderate to strong, compared with 45% of silent readers. Besides, 67% of the listener group mentioned that they can clearly imagine the author's voice, while only 35% of silent readers mentioned such a vivid internal voice. This lends support to the idea that auditory exposure enhances activation of inner prosody during further reflection. While comparing personal connection, listeners again demonstrated higher engagement; almost 60% described the poem as personally resonant, meanwhile, among silent readers this number

dropped to 35%. But both groups demonstrated relative awareness of rhythmic and structural elements: about 40-50% noted rhythm, tone and pauses as key features, which highlights that sensitivity to poetic form doesn't depend fully on auditory input.

In terms of vividness of imagery, results were mixed: 62% of the silent reading group reported forming vivid images, while 58% of the listening group confirmed that the auditory rhythm helped them to imagine scenes more dynamically. It shows us that both modes stimulate imagery, though they do it through different mechanisms – the auditory channel emphasises rhythm and tone, while visual reading supports deliberate mental visualisation. During aesthetic evaluation, the listeners gained high points again: 78% described the poem as “beautiful” and “musically appealing”, compared to 59% of readers. Conversely, memorability was higher among readers (68%) than among listeners (46%), which confirms that the act of reading facilitates deeper cognitive processing and retention.

In general, these results partially support the hypothesis. Listening indeed intensified emotional and aesthetic reactions due to prospective signals, which aligns with theories about inner prosody and phonological imagery. But silent reading appeared to be more effective in terms of comprehension and memorability, which supports cognitive approaches, highlighting reader-controlled processing and metacognitive engagement. These results demonstrate that modality has a distinctly shaped internal response system: listening activates emotional and rhythmic resonance, while visual reception promotes analytical and mnemonic engagement.

Conclusion: Silent reading of poetry goes beyond the frame of a purely visual act. It is deeply influenced by inner prosody, which involves mental rhythm simulation, stress and intonation. This hidden layer of phonological imagination shows that poetry is perceived not only with eyes, but with the inner ear, which makes reading an embodied and effective process. Though studies started to unveil the significance of subvocalisation, auditory imagery and prosodic cues in forming comprehension and emotional resonance, this dimension remains comparatively not thoroughly studied. Deeper study of inner prosody has the potential to enrich linguistic theory and literary studies, demonstrating a complicated interaction between cognitive mechanisms and aesthetic experience. Besides, pedagogical applications are of equal importance, since increased awareness about inner prosody can help teachers in promoting deeper engagement in poetry and help people in studying a second language, developing their sense of rhythm and intonation. Integrating linguistics, psychology and literary studies, future endeavours can shed light on the manner in which inner prosody converts silent reading into a distinctly personal yet universal human experience.

Discussion: Silent poetry reading, despite its external silence, still involves what we can call auditory imagination. When a reader sees in text rhythm, stress or intonation cues, their mind starts an inner act, similar to speaking. It shows that reading is not just changing symbols into meanings, but a physical act, which involves sound, rhythm and voice, even if we hear it only inside ourselves. This idea mixes the border between language and text, highlighting that poetry is not just something we see, but also how we hear it in our consciousness. From the reader-response theory point of view, this inner performance is key to how each person perceives reading. Each reader creates their own way of expressing the poem: some people may think about stable and serious rhythms, meanwhile others feel a more lively, dramatic tone. This means that how we understand a poem can't be separated from personal rhythm and melody, which readers add while reading. It is in this inner voice that our personal connection with poetry becomes very distinct, turning silent reading into a close conversation between the text and our imagination. Linguistically, the implications are significant. Phonetics and prosody, which are usually considered to be parts of spoken language, also play a role

in mental processes behind silent reading. They act like links between writing and speaking, influencing comprehension, emotional feelings and beauty perception. In this way, poetry uses rhythm, rhyme and pauses to enhance these processes. It shows how important the sound patterns are, even beyond spoken words. Reading silently can be viewed as a combination of experiences: the mind considers the speech, the eyes perceive the words, and the emotions respond to both. In general, though the differences are not statistically significant in a strict inferential meaning due to the small sample size, the consistent pattern of higher emotional involvement and prosodic imagination among listeners supports the hypothesis that hearing the poet's voice amplifies the inner prosody and emotional depth of the reading experience. This demonstrates that poetry is not just found on paper; it also comes to life in the reader's mind. It also explains why poetry frequently has a very intimate sense to it; even when no sound is produced, reading poetry aloud is like doing so.

REFERENCES:

1. Alderson-Day, B., & Fernyhough, C. (2015). Inner speech: Development, cognitive functions, phenomenology, and neurobiology. *Psychological Bulletin* <https://pubmed.ncbi.nlm.nih.gov/26011789/>
2. Bloemert, J., Paran, A., Jansen, E., & van de Grift, W. (2017). Students' perspective on the benefits of EFL literature education. *The Language Learning Journal* https://www.researchgate.net/publication/315895290_Students'_perspective_on_the_benefits_of_EFL_literature_education
3. Blohm, S., Versace, S., Methner, S., Wagner, V., Matthias Schleewsky, & Winfried Menninghaus. (2022). Reading Poetry and Prose: Eye Movements and Acoustic Evidence. *Discourse Processes* <https://www.tandfonline.com/doi/full/10.1080/0163853X.2021.2015188#abstract>
4. Jacobs, A. M. (2015). Neurocognitive poetics: methods and models for investigating the neuronal and cognitive-affective bases of literature reception. *Frontiers in Human Neuroscience* https://www.researchgate.net/publication/303198405_Neurocognitive_poetics_methods_and_models_for_investigating_the_neuronal_and_cognitive-affective_bases_of_literature_reception
5. Nalborczyk, L., Grandchamp, R., Koster, E. H. W., Perrone-Bertolotti, M., & Loevenbruck, H. (2020). Can we decode phonetic features in inner speech using surface electromyography? *PLOS ONE* <https://pmc.ncbi.nlm.nih.gov/articles/PMC7252628/?utm>
6. Obermeier, C., Kotz, S. A., Jessen, S., Raettig, T., von Koppenfels, M., & Menninghaus, W. (2015). Aesthetic appreciation of poetry correlates with ease of processing in event-related potentials. *Cognitive, Affective, & Behavioural Neuroscience* <https://link.springer.com/article/10.3758/s13415-015-0396-x>
7. Obermeier, C., Kotz, S. A., Jessen, S., Raettig, T., von Koppenfels, M., & Menninghaus, W. (2016). Aesthetic appreciation of poetry correlates with ease of processing in event-related potentials. *Cognitive, Affective, & Behavioural Neuroscience* <https://cris.maastrichtuniversity.nl/ws/portalfiles/portal/8184378/3007447.pdf>
8. Spirovskaja, E. (2019). Reader-Response Theory and Approach: Application, Values and Significance for Students in Literature Courses. *SEEU Review*, 14(1), 20–35. <https://reference-global.com/article/10.2478/seeur-2019-0003?tab=download>
9. van Peer, W. and A. Chesnokova A. (2024). "The Sound Must Seem an Echo to the Sense": Experiencing Oral and Silent Reading of Poetry. In L. Pillière and S. Sorlin (eds), *Style and Sense(s)*. Cham: Palgrave Macmillan, pp. 235–257. https://www.researchgate.net/publication/380473314_The_Sound_Must_Seem_an_Echo_to_the_Sense_Experiencing_Oral_and_Silent_Reading_of_Poetry
10. van Peer, W. and A. Chesnokova. (2025). The Sound of Meaning, and the Meaning of Sound. *Phonetic Iconicity in Literature*. In J. Alber and R. Schneider (eds), *The Routledge Companion to Literature and Cognitive Studies*. New York: Routledge, pp. 532–544. https://www.researchgate.net/publication/392731025_The_Sound_of_Meaning_and_the_Meaning_of_Sound_Phonetic_Iconicity_in_Literature
11. Yao, B. (2021). Mental Simulations of Phonological Representations Are Causally Linked to Silent Reading of Direct Versus Indirect Speech. *Journal of Cognition* <https://journalofcognition.org/articles/10.5334/joc.141?utm>