

The Cognitive Processing of Paratextual Impact on Reading Responses to Poetry

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Abstract

This study aims to explore the impact of paratextual information on students' reading responses to poetry as well as its cognitive processing. The researchers utilize a quantitative approach to study how three types of paratextual information—authorial attribution, biographical information, and genre label—affect students' reading responses to poems, specifically their emotional engagement, aesthetic judgement, comprehension, and quality evaluation of poems. The findings indicate that paratextual information affects some aspects of readers' experiences and that different types of paratextual information have unique effects. Further, the researchers describe the role of attention and memory systems when the paratextual information is detected and processed by the participants. The mechanisms of the attention and memory systems are applied to analyze and account for the consequences of the paratextual impact. The researchers argue that the provided paratextual information falls on a continuum from being ignored to detected/noticed. Only the detected/noticed information is further processed in the short-term memory where connections between prior knowledge or situations and current texts or contexts are activated and established, leading to different reading responses. Finally, the researchers propose suggestions for navigating the impact of paratextual information in literary education.

Keywords: paratextual information, attention system, memory system, reading responses, poetry, cognitive processing, literature in language teaching

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Grabe and Stroller (2002) explained that the “reading process refers to cognitive activity involving skills, strategies, attentional resource, knowledge resources, and their integration” (p. 9). Readers’ own experiences, knowledge, and their own ideas, together with the information gathered from texts (Aissati & Stokmans, 2015) and from paratexts (Dixon, Bortolussi, & Sopcak, 2015) are involved in interpreting texts. Therefore, in order to better understand reading processes, it is necessary to identify the cognitive processes of the interaction between readers, texts, and paratexts (Dixon & Bortolussi, 2011). There are a number of studies on literary reactions and paratextual impact (e.g. Arnold & Brooks, 1976; Bransford & Johnson, 1973; Dixon et al., 2015; Doctorow, Wittrock, & Marks, 1978; Dooling & Lachman, 1971; Hanauer, 2015; Harris, Mandias, Meerum Terwogt, & Tjintjelaar, 1980; Tajeddin, 2013), however, none of these studies examined the cognitive process of readers’ reading reactions to poetry. Little is known about how paratextual information is processed by readers and how it influences their reading responses, particularly for poetry.

Dixon & Bortolussi (2011) thought that more research should be conducted on literary processing, cognitive processing, and literary reactions. This paper responds by attempting to describe the role of a cognitive mechanism implicated in paratextual impact on reading reactions to poetry through the attention and memory systems. This present study contributes to the growing field of the scientific study of literature, particularly poetry, by examining how knowledge extraneous to the poetic text itself influences reactions to the text and such cognitive processes.

This paper starts with a review of the literature on the paratextual impact on literary reactions, followed by the theories of the attention and memory systems. Then, the current study on the effects of three types of paratextual information is provided. Afterwards, the cognitive processes concerning the impact of the paratextual information on students’ reading reactions are analyzed. Finally, the paper concludes by offering some implications regarding literary instruction and recommendations for future research.

Literature Review

The term *paratext* was first introduced by Genette (1997) and refers to various types of information accompanying a text, which are “both within the [text] and outside it, that mediate the [text] to the reader: titles and subtitles, pseudonyms, forewords, dedications, epigraphs, prefaces, intertitles, notes, epilogues, and afterwords” (p. xviii). Dixon et al. (2015) used the term *extratextual* to refer to the information outside a text yet still related to it, such as a review of a work, which may influence readers’ evaluation or judgment of the text. Literary reactions are affected by textual

information, used by authors to shape readers' intentions and dispositions, as well as by [extratextual] information (Dixon & Bortolussi, 2011). In this paper, "paratextual" and "extratextual" information is utilized alternately, referring to the information outside a text and provided to readers to manipulate their reading responses and evaluations of a text. Paratextual/extratextual information "is mostly provided even before the reader opens a book, through cover details, like the name of the author, the title or genre indications. Such signals provide key knowledge to the reader and trigger certain expectations" (Altmann, Bohrn, Lubrich, Menninghaus, & Jacobs, 2014, p. 22). In this case, readers' cognitive and emotional responses are to some degree dependent on paratexts that prompt readers' previous knowledge and direct or trigger their expectations.

Previous studies have explored the diverse effects of paratextual information on literary responses. Some scholars have studied how paratextual information influences participants' comprehension, retention, and evaluation of a text. For example, providing readers with paratextual information such as visuals, titles, and the setting could help them make correct inferences (Arnold & Brooks, 1976) and recall the texts (Arnold & Brooks, 1976; Bransford & Johnson, 1973; Doctorow et al., 1978; Dooling & Lachman, 1971; Harris et al., 1980) as well as better comprehend the texts (Bransford & Johnson, 1973; Doctorow et al., 1978; Harris et al., 1980). Likewise, Hanauer's (2015) study indicated that the paratextual knowledge about an author's professional background—whether or not the author is a published poet—significantly influenced participants' beauty judgement, quality evaluation, and emotional responses. Additionally, some research revealed that the impact of paratextual knowledge was contingent on participants or contexts. For example, according to his study of the effect of three paratextual aids—titles, prefaces, and pictures—on comprehension and recall, Tajeddin (2013) argued that paratextual impact varied depending on the EFL readers' language proficiency.

According to our knowledge, only a limited number of studies have investigated the cognitive processes of reading narratives and novels with additional paratextual information. Altmann et al. (2014) applied a psychological approach to study the neurocognitive processes of reading responses to novels. Their study demonstrated that different brain activation patterns were observed depending on whether a short narrative was labeled as factual or fictional: "an action-based reconstruction of the events depicted in a story" and "a constructive simulation of what might have happened" (p. 22). Similarly, Dixon et al. (2015) applied two mechanisms, process orienting and evaluation adjustment, to examine and explain the effect of extratextual information, in this case critical reviews, on readers' evaluation of novels. Their study indicated that extratextual

effects differed depending on whether the review was read prior to or after the novel. When extratextual information such as a review was read before a text, the readers' attention could be oriented to certain aspects of the text, influencing the readers' evaluation of the text. If the review was read after a text, readers adjusted or modified their evaluation of the text.

Building on the previous literature, the aim of this study is twofold. The first goal is to further explore the impact of diverse types of paratext on reading responses to literary work. In particular, this study attempts to survey whether three types of paratextual impact—authorial attribution, biographic information, and genre label—affect participants' reading responses to poetic texts. Additionally, this paper endeavors to explore the “causal insight” (Dixon & Bortolussi, 2008, p. 75) of the paratextual impact on literary responses by describing its cognitive mechanisms—the attention and memory systems.

The Attention and Memory Systems

Reading responses are contingent upon textual and paratextual information as well as how this information is processed by readers. To better understand how paratextual information plays a role in reading processes, it is essential to learn how paratextual information is processed in the attention and memory systems.

Attention System

People “are bombarded with overwhelming amounts of sensory and cognitive information” (Tomlin & Villa, 1993, p. 184), but only part of the information is accepted, processed, and stored in memory. It is the human attention system that controls “the quantity and quality of information that enters the individual's mind” for further processing (Hanauer, 1999, p. 17). The three functions of the attention system—alertness, orientation, and detection (Hanauer, 1999; Posner & Petersen, 1990; Tomlin & Villa, 1993) allows it to act as the filter and determines what information is important to be noticed. Tomlin and Villa (1993) argue that alertness, orientation, and detection are separate but interrelated. Alertness prepares readers to cope with information and data, which may or may not be attention-oriented. Orientation allocates attentional resources to a specific type or class of sensory information, which may be further detected and then processed. Detection, similar to Schmidt's (1990) conception of “noticing,” refers to the process that attention resources are actually committed to select and engage specific information. Among the above three functions, detection is the most crucial for information processing or learning because only when information is detected can it be processed and registered in memory (Tomlin & Villa, 1993).

On the one hand, the attention system is capacity-limited (Robinson, 1995; Tomlin & Villa, 1993), therefore, “information competes for limited attentional resources” (Robinson, 1995, p. 290). Eventually, some information is “detected” (Tomlin & Villa, 1993) and “noticed” (Schmidt, 1990) and then “is elaborated or rehearsed,” while the perceived unimportant or irrelevant information is ignored and “forgotten” (Robinson, 1995, p. 290). On the other hand, “attentional engagement is established, coordinated, maintained, interrupted, redirected, [and adjusted]” (Allport, 1989, pp. 662-663). In other words, the attention system can be directed or manipulated to specific information or knowledge through heightening alertness, orientation, and detection or via enhancing its “noticeability” (Schmidt, 1990). For example, Tomlin & Villa (1993) suggested applying certain instructions or instructional techniques such as input flooding or explicit instruction; Schmidt (1990) proposed maneuvering expectations, frequency, perceptual salience, skill level, and task demands to enhance noticeability.

Memory System

Together with the attention system, the memory system is involved in the information processing. Short-term memory is considered as “the site of control processes such as directing focal and peripheral attention, rehearsing current information, and coding new inputs” (Robinson, 1995, p. 304) as well as “the interface between everything we know and everything we can see or do” (Cowan, 1993, p. 166). In the short-term memory, all the detected information from multiple sources is processed, elaborated, rehearsed, and prior knowledge is activated. Depending on whether readers can find connections or associations between their prior knowledge and current texts, contexts, or task demands, the detected information is either further processed or ignored and forgotten, leading to various reading responses. We propose a diagram illustrating the cognitive mechanisms concerning how textual and paratextual information might be processed in the attention and memory systems (see Figure 1).

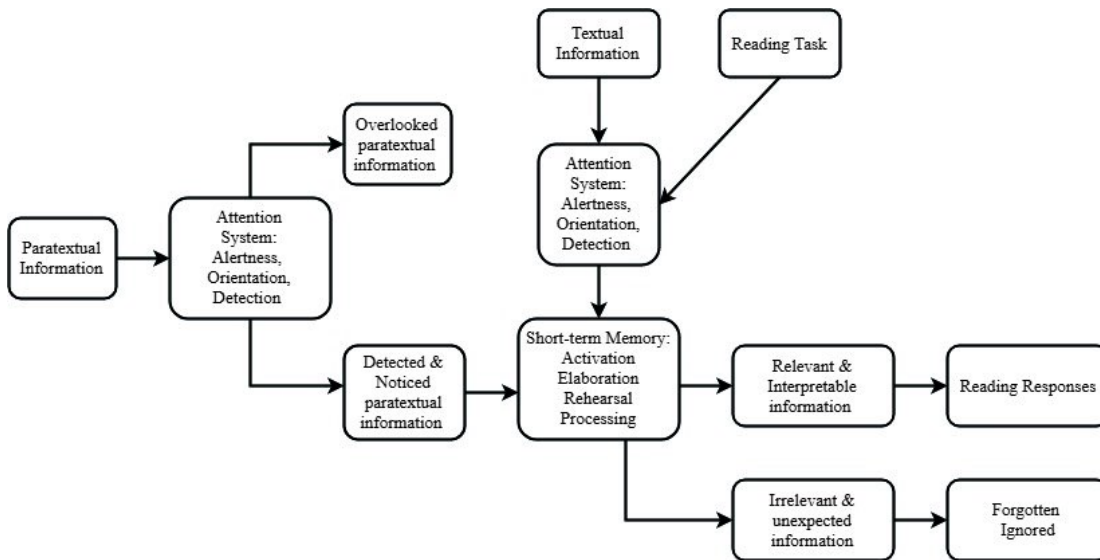


Figure 1. Cognitive Mechanism.

When reading, readers need to deal with copious amounts of information, both textual and paratextual. Since this present study is interested in how the mechanisms of attention and memory function in paratextual information processing, the textual information remains unchanged.

Methodology

Study Design

The purpose of this study is to examine whether the presence or absence of three types of paratextual information — entailing authorial attributions, biographical information, and genre labels — influences reader response to poetry. The current experiment was conducted through online survey software, Qualtrics. Each participant first read an instruction with or without one of the above three types of paratext, then, read a poem and rated 12 statements pertaining to their emotional engagement, aesthetic judgement, quality evaluation, and comprehension of the poem. Each participant read the same three poems in varying order regardless of the presence or absence of prior paratextual information. Consequently, the participants were randomly classified into two groups that were treated with different paratexts (see Figure 2).

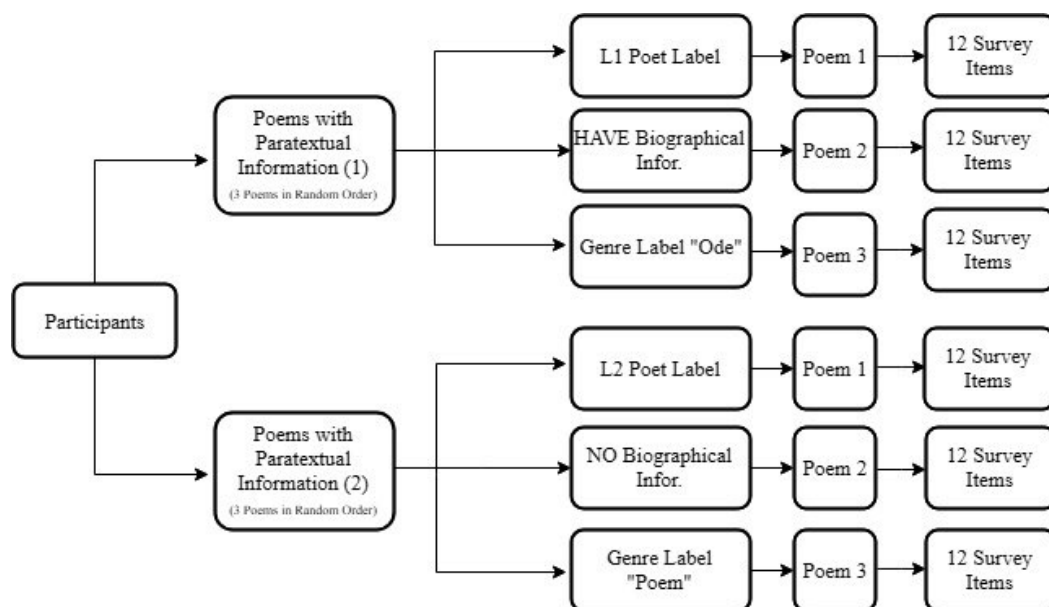


Figure 2. Research Design.

To direct participants' attention to these paratextual elements, techniques were employed to foreground the paratextual information. For example, the paratextual information was displayed on a separate screen before the corresponding poem. In addition, together with the paratext, there was a sentence reminding participants to read the given information before moving on to the page containing the poem. Participants had to click the button labeled "next" when they finished reading the instructions to move on to the page containing the poem.

Regarding the effects of authorial attributions as paratextual manipulation, the researchers were interested in whether and how a poet's language background influenced participants' reading responses. Therefore, participants were provided with the paratextual information highlighting the poet's language background. The two sets of paratext that participants read were (1) "The following screen contains a poem by Mei-Mei Berssenbrugge, who is a poet born in Beijing, China. She uses English as a second language;" or (2) "On the next screen, you will read a poem by Christine Smith, who is a poet born in New York. She uses English as a first language." Afterwards, participants were presented the poem "From The Field for Blue Corn" written by Berssenbrugge (2016). The first piece of paratextual information, from the introduction to poets on *Dusie* (19), a poetry *kollektiv* —Berssenbrugge uses English as a second language—is real, while (2) is false. Our hypothesis was that participants would experience a higher degree of comprehension and emotional response when they read the poem by a poet who shared the same language background and culture with the participants.

The effects of biographical information were studied for the poem "At Toomebridge". Two different reading instructions were displayed respectively: (1) "The following screen contains

biographical information about Seamus Heaney—a poet. Please read the entire instruction. Seamus Heaney is widely recognized as one of the major poets of the 20th century. A native of Northern Ireland, Heaney was raised in County Derry, and later lived for many years in Dublin. He was the author of over 20 volumes of poetry and criticism and edited several widely used anthologies. He won the Nobel Prize for Literature in 1995 ‘for works of lyrical beauty and ethical depth, which exalt everyday miracles and the living past.’ Heaney taught at Harvard University (1985-2006) and served as the Oxford Professor of Poetry (1989-1994). He died in 2013;” or (2) “The following screen contains a poem”. Seamus Heaney’s (2003) biographical information was collected from the *Norton Anthology of Modern and Contemporary Poetry* (3rd ed. Vol. 2), where his poem “At Toomebridge” was published. Hanauer’s (2015) study suggested that novice reader reviewers based their emotional response, quality evaluation, and beauty judgement to poetry on “a sense of authority assigned to the writer” (p. 197). Thereby, the researchers hypothesized that emotional engagement, quality evaluation, and aesthetic judgement would be scored higher after being informing of the poet’s biographical information emphasizing his achievements.

Paratextual effects of genre labels were examined using the third poem “Manhole Covers” by Karl Shapiro (2003). The two different reading instructions were presented: (1) “The following screen contains information about a poem written by Karl Shapiro. Please read the entire introductions. The following poem is an *ode*. An ode is a formal, ceremonious lyric poem that addresses and celebrates a person, place, thing, or idea. Its stanza forms vary;” or (2) “The following screen contains a poem. Please read the entire poem”. Our hypothesis was that words such as “ceremonious” and “celebrate” within the description of the genre label “ode” would lead to higher emotional engagement or comprehension.

Participants

After obtaining approval from specified by the Institutional Review Board (IRB, IUP Log # 17-259), an online survey (Qualtrics) was distributed to Chinese and American undergraduates through a letter of invitation to professors in China and a medium-sized research university in Western Pennsylvania in America. In addition, the online survey was posted on student social media pages (WeChat and QQ) in China. The participants in this study were all college students enrolled in either a university in China or the aforementioned university in Western Pennsylvania. 63 students reported that they used English as a first language, 73 used English as a second language, and 3 students did not state English as a first or a second language. 142, 152, and 149 students completed the survey for the three poems respectively.

Instruments

Poems. The three poems for the study were randomly selected from the *Norton Anthology of Modern and Contemporary Poetry* (3rd ed. Vol. 2) (Contemporary Poetry) and *Dusie* (19), a poetry *kollektiv*, based on the following criteria: 1) the poems had to be in English; 2) the poems had to be contemporary; 3) the poems had to be less than 100 words in length. The poems were selected according to the page number within each collection, given by the Google random number generator (See Appendix A).

Measures. After finishing reading each poem, participants were presented 12 statements with a 5-point Likert agree/disagree scale and two open-ended questions. (1=Strongly Disagree, 2=Somewhat Disagree, 3=Neither Agree nor Disagree, 4=Somewhat Agree, 5=Strongly Agree). These 12 statements measured participants' self-perceived emotional engagement, aesthetic judgement, quality evaluation, and comprehension of the poems (See Appendix B). These items were adapted from the survey created by Hanauer (2015); Kuijpers, Hakemulder, Tan, and Doicaru (2014); and Miall and Kuiken (1995).

Demographic questions. Per the IRB protocol (Log # 17-259 IUP), in addition to the three poems and 12 survey items, participants were asked to answer multiple choice questions concerning their gender, age, educational level, residence, major, and the language they used. All incomplete surveys were deleted prior to analysis of data.

Data Analysis and Results

The collected data consists of the participants' responses to the 12 survey items and their demographic information. First, descriptive analysis was conducted on collected data in SPSS (the Statistical Package for the Social Sciences, a software package used in statistical analysis) to obtain the overview of the dataset and to examine the assumption of normality; the data was not normally distributed, so, the Mann-Whitney U test was utilized. In statistics, the Mann-Whitney U test is a test used to compare differences between two independent groups when the dependent variable is not normally distributed. Independent Mann Whitney U tests were run to compare the effect of presence/absence of paratextual information on reading responses.

The Mann-Whitney U tests indicated that the impact of the three types paratextual information negated our hypotheses and were inconsistent with the findings from previous literature. The three types of paratextual information indicated either no impact or reverse impact on the participants' reading reactions. That is to say, the participants who did not read paratextual information indicated higher degree of reading responses compared with those who did; this

discrepancy could be the result of the processing of paratextual information in their cognitive mechanisms.

Authorial Attribution

The Mann Whitney U test indicated that there was no significant difference in reading responses to poetry between the presence and absence of paratextual authorial attribution—the poet’s language background. The participants were not influenced by the author’s language background in terms of their emotional engagement, aesthetic judgement, reading comprehension, and quality evaluation. The participants appeared to notice and process the poem itself rather than the given paratextual authorial attribution in their attention and memory systems.

Table 1

Mann-Whitney U Test of Paratextual Authorial Attribution

| Dependent Variables | Grouping | Mean Rank | Mann-Whitney U | Sig. (2-tailed) |
|----------------------|---------------|-----------|----------------|-----------------|
| Emotional Engagement | L1 Poet Label | 69.99 | 2413.50 | 0.885 |
| | L2 Poet Label | 70.98 | | |
| Aesthetic Judgement | L1 Poet Label | 71.72 | 2365.00 | 0.728 |
| | L2 Poet Label | 69.35 | | |
| Comprehension | L1 Poet Label | 75.24 | 2126.00 | 0.168 |
| | L2 Poet Label | 66.03 | | |
| Quality Evaluation | L1 Poet Label | 70.61 | 2440.50 | 0.975 |
| | L2 Poet Label | 70.40 | | |

Note: *p<.05

Biographical Information

A Mann-Whitney U Test indicated that confidence in comprehension of the meaning of the poem was greater for participants who viewed no biographical information (Mdn = 84.13) than for participants who did view biographical information (Mdn = 69.07), $U = 2315.5$, $p = .029$. No other significant differences were found based on the presence or absence of biographical information.

Table 2

Mann-Whitney U Test of Paratextual Biographic Information

| Dependent Variable | Grouping | Mean Rank | Mann-Whitney U | Sig. (2-tailed) |
|--|-----------------------------|-----------|----------------|-----------------|
| Comprehension – “I have an idea of what the poem is about while reading it.” | Biographical Information | 69.07 | 2315.00 | 0.029* |
| | No Biographical Information | 84.13 | | |

Note: * $p < .05$

Genre Information

The Mann Whitney U test indicated that emotional engagement was lower for participants who viewed a specific genre label (Mdn = 66.87) than for participants who did not (Mdn = 83.24), $U = 2165.00$, $p = .015$. Specifically, this test indicated that participants felt less connected to the poet when presented with a genre label “Ode” prior to reading a poem. The Mann Whitney U test also indicated that aesthetic judgement was lower for participants who viewed a specific genre label (Mdn = 66.91) than for participants who did not (Mdn = 83.20), $U = 2168.50$, $p = .018$. Specifically, this test indicated that participants felt the poem was less rhythmic when presented with a specific genre label prior to reading a poem. No other significant differences were found based on genre label provided prior to participants reading the poem.

Table 3

Mann-Whitney U Test of Paratextual Genre Labels

| Dependent Variables | Grouping | Mean Rank | Mann-Whitney U | Sig. (2-tailed) |
|---|--------------------|-----------|----------------|-----------------|
| Emotional Engagement – “I felt how the poet was feeling.” | Ode Genre Label | 66.87 | 2165.00 | 0.015* |
| | Poetry Genre Label | 83.24 | | |
| Aesthetic Judgement – “The poem had rhythm.” | Ode Genre Label | 66.91 | 2168.50 | 0.018* |
| | Poetry Genre Label | 83.20 | | |

Note: * $p < .05$

Discussion

In reference to paratextual impact, the results indicate that the three types of paratextual information do have a limited effect on how readers respond to poetry, and different paratextual elements appear to affect different responses.

Firstly, the poet’s language background did not result in significant differences in reading responses. According to the cognitive mechanisms—the attention system, what the participants in the current study might have experienced was that the paratextual information was either overlooked or detected/noticed and then forgotten. Although the current experiment was designed to enhance the “alertness” and “orientation” via foregrounding the paratextual information and demanding participants to read through it, participants possibly remained unaware of the given information because it was not salient enough nor evident. In addition, our online survey actually required the participants to give immediate responses in a short period of time; thus, the participants possibly did not have time or opportunities to closely read and then notice the paratextual information. Further, the participants may not have realized that they were expected to connect the paratextual information to the poem. That is, the participants failed to notice the given information when “the input can[not] be organized within a current context” (Baars, 2007, p. 268). Consequently, they may have dealt with the two types of information—paratextual and textual—separately.

There exists another possibility that might explain why the participants were not influenced by the given paratext: the paratextual information provided was initially detected by participants but

subsequently eliminated from their attention system or was forgotten. In that case, their detection system of attention decided that the given information did not conform to their criteria in relation to what was and what was not worthy of noticing (Baars, 2007). Further, the “limited capacity of short-term memory” (Robinson, 1995, p. 318) might account for why some information was forgotten. In short-term memory, prior knowledge is activated and supposed to connect with the current text or context. If the paratextual information provided did not activate participants’ prior knowledge and previously experienced texts; and/or failed to enable the readers to compare with the current attended context or to recall the previous context; and/or could not trigger the associations with the current texts, participants were likely to consider the paratextual information as irrelevant, hence eliminating it from their attention and memory systems.

Secondly, biographical information impacted the participants’ reading processes to some degree. The participants who did not view biographical information before the poem perceived greater degree of comprehension than those who did. This finding suggests that the information about the author, which highlighted his/her achievements and reputation, may make the participants think that his/her poem has more underlying meanings. The previous study by Hanauer (2015) examined the impact of authorial attribution on quality evaluation, suggesting that the poem by a published author was positively related to its quality. However, the results of the current study challenge this claim. There was no significant difference between the independent variable—biographic information—and the dependent variables: entailing emotional engagement, aesthetic judgement, and quality evaluation, except for “comprehension.” That is, the biographic information did impact the participants’ reading experiences, but in a reverse direction—it suppressed reading comprehension, opposing the positive paratextual effects of promoting reading comprehension (Bransford & Johnson, 1973; Doctorow et al., 1978; Harris et al., 1980).

Lastly, in a similar fashion, in this study the impact of genre labels was verified, though in a different way from the findings in previous literature. Our finding echoes the influence of a genre label in the study by Altmann et al. (2014) and by Piters and Stokmans (2000). However, the genre label in our study affected participants in a contrary direction: the genre label “Ode” restrained readers’ emotional engagement and aesthetic judgement. The participants who did not read the genre label “Ode” before reading the poem felt more emotionally connected to the poet and the rhythmic beauty compared with those who viewed the genre label. In contrast, the study by Piters and Stokmans (2000) suggested that genre label identified by a book cover engaged readers’ emotions in helping them sort out their preferred books.

With regard to different types of paratextual information, some were “allocate[d] [more] cognitive resources [by] attention system, leading to noticing, and subsequent encoding in memory” (Robinson, 1995, p. 286), while some were ignored or forgotten. Dixon and Bortolussi (2011) contended that paratexts “would be particularly relevant if the reader needed that information to appreciate the text and if the reader was willing and able to use that information” (p. 82). For example, in this study, authorial attribution—author’s language background—may be perceived as irrelevant to understanding or appreciating the poem. Therefore, this type of information was not detected nor processed, thus having no influence on the participants’ reading responses. Paratextual elements affect readers’ responses to texts via triggering their expectations and prior knowledge (Dixon & Bortolussi, 2011; Altmann et al., 2014). However, if the given paratextual information fails to activate readers’ prior knowledge or expectations and connections to the texts or contexts, readers may not react in the anticipated way. Accordingly, paratexts are either unable to impact readers or, in this case biographical information and genre labels, influence readers in an opposite direction.

There are limitations in this study. First, the detection and noticeability of the three paratextual elements could have been enhanced more. For instance, in this study, the paratexts only appeared on the screen once, so some readers may not have been able to notice them well. A future study could also consider boosting the factors put forward by Schmidt (1990)—expectations, frequency, perceptual salience, skill level, task demands—to increase the noticeability of paratexts. Second, this study was limited by the number of poems used. In a future study, we would like to use more poems randomized in the survey, thereby negating the chance that responses are related to specific poems rather than paratextual elements. Finally, the current study was limited in its research method and selected participants. Future research could include more types of paratextual elements and involve more participants, as well as employ additional research methods such as functional Magnetic Resonance Imaging (fMRI) along with think aloud and interviews to collect data so as to acquire more thorough and comprehensive understanding of the impact of paratextual information and its cognitive processes.

Conclusion

In spite of the limitations, our findings suggest insights concerning the impact of paratextual knowledge and its cognitive processes. The impact of three types of paratextual elements — authorial attribution, biographical information, and genre label — on reading responses to poetry were limited. The knowledge concerning poets’ language backgrounds did not influence reading

reactions; the presence of biographical information and genre label did not positively correlate with emotional engagement, aesthetic judgement, comprehension, and quality evaluation; rather, they suppressed comprehension, emotional engagement, and aesthetic judgement. Consequently, in literary education, paratexts should be carefully selected depending on specific teaching objectives. Additionally, this study explores the cognitive processing of paratextual impact on reading experiences of poetry. The attention and memory systems play a key role in manipulating paratextual impact. The limited capacity of attention and short-term memory as well as personal differences of readers in relation to their prior knowledge or expectations also affect what and how much information is detected and processed, which indirectly sways paratextual impact. As a result, to ensure a particular type or class of paratexts is detected in the attention system, techniques and approaches pertaining to instructions, quantity of information, awareness, and repetition could be deployed. Furthermore, to help readers capitalize on paratextual knowledge effectively, paratexts should be able to activate readers' expectations or help establish a connection between their prior knowledge and current text or context.

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Appendix A (Three poems)

Poem 1

From The Field for Blue Corn
By Mei-Mei Berssenbrugge

Certain colors are the conversation
we held one dusk, that altered
from the violent afterglow of fresh bones
to the gray corolla of old ones, only minerals
as restless matrices in blue sage dissolved
a horntoad ran under a bush. I insisted it was
a baby bird. Then a baby bird *and* a horntoad
ran out. Now, on a hill I never noticed
between two close ones we've climbed, I see
at an altered angle. Some small shift in refraction
has set the whole plain trembling and hostile

Poem 2

At Toomebridge
by Seamus Heaney

Where the flat water
Came pouring over the weir out of Lough Neagh
As if it had reached an edge of the flat earth
And fallen shining to the continuous
Present of the Bann.

Where the checkpoint used to be.

Where the rebel boy was hanged in '98.
Where negative ions in the open air
Are poetry to me. As once before
The slime and silver of the fattened eel.

Poem 3

Manhole Covers by
Karl Shapiro

The beauty of manhole covers—what of that?
Like medals struck by a great savage kahn,
Like Mayan calendar stones, unliftable, indecipherable,
Not like the old electrum, chased and scored,
Mottoed and sculptured to a turn,
But notched and whelked and pocked and smashed
With the great company names
(Gentle Bethlehem, smiling United States).
This rustproof artifact of my street,
Long after road are melted away will lie
Sidewise in the grave of the iron-old world,
Bitten at the edges,
Strong with its cryptic American,
Its dated beauty.

Appendix B

The 12 statements measuring participants' reading responses and two open-ended questions (1=Strongly Disagree, 2=Somewhat Disagree, 3=Neither Agree nor Disagree, 4=Somewhat Agree, 5=Strongly Agree)

| Category | Statements | 1 | 2 | 3 | 4 | 5 |
|----------------------|---|---|---|---|---|---|
| Emotional Engagement | 1) When I read the poem, I visualized the places described in the poem. | | | | | |
| | 2) I saw what happened in the poem through the eyes of the poet. | | | | | |
| | 3) I felt how the poet was feeling. | | | | | |
| | 4) When I read the poem, I felt I was in the poem's world. | | | | | |
| Aesthetic Judgement | 5) The poem had rhythm. | | | | | |
| | 6) The poem had features of poetry. | | | | | |
| | 7) The poem was beautiful. | | | | | |
| Comprehension | 8) The meaning of this poem is hard to understand. | | | | | |
| | 9) I had an idea of what the poem is about while reading it. | | | | | |
| Quality Evaluation | 10) The author put a lot of effort into writing this poem. | | | | | |
| | 11) The poem could be published in a book. | | | | | |
| | 12) Overall, the poem is well written. | | | | | |
| Open-ended Questions | Please list the emotions experienced while reading the poem. | | | | | |
| | Please use two or three sentences to describe how you feel about this poem. | | | | | |