

ORIGINAL ARTICLE

Does it Matter Where You Read? Situating Narrative in Physical Environment

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While language use in general is currently being explored as essentially situated in immediate physical environment, narrative reading is primarily regarded as a means of decoupling one's consciousness from the environment. In order to offer a more diversified view of narrative reading, the article distinguishes between 3 different roles the environment can play in the reading experience. Next to the traditional notion that environmental stimuli disrupt attention, the article proposes that they can also serve as a prop for mental imagery and/or a locus of pleasure more generally. The latter 2 perspectives presuppose a more clear-cut distinction between consciousness and attention than typically assumed in the communication literature. The article concludes with a list of implications for research and practice.

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Books are portable devices. People read them in various places, but never in a vacuum. This article explores how the experience of narrative reading is environmentally situated.

Situated cognition, that is, the notion that the human mind and thought are one with the body and environment, is among the most rapidly expanding theoretical frameworks concerning language, culture, and learning. For instance, researchers pay close attention to how gestures and ocular movements in spoken discourse, by their systematic orientation in physical space, enhance meaning retrieval and comprehension (e.g., Spivey & Richardson, 2008). But what might the idea of a situated mind entail for our understanding of narrative reading, another practice in which language, culture, and learning so intricately intersect? It has long been explored how stories afford vastly different experiences depending on who the reader is. Into every narrative experience, the individual reader brings a unique combination of personality traits, sociocultural background, existential concerns, bodily makeup, and so forth.

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This is an important albeit mostly figurative sense in which narrative reading may be environmentally situated. At a slightly more literal level, researchers and practitioners probe the different ways in which narrative reading is affected by immediate social environments in spatially constrained book therapy meetings (Dowrick, Billington, Robinson, Hamer, & Williams, 2012), discussion groups (Allington, 2011), or literature classes (Fialho, Zyngier, & Miall, 2011). What remains wholly unexplored, however, is how solitary reading relates to environment at its most literal: Does it make a difference *where* we read? And does this vary across books? These are the two pivotal questions of this article.

Few would doubt that the workings of visual and aural media are often environment-sensitive. While literary readers, if explicitly asked, do indicate preferences for particular places to read (Burke, 2011), little has been published on the more general mechanics at work between physical environment and reading experience. This may be partly due to the common intuition that continuous reading, unlike other narrative-receptive activities such as audiobook listening (Wittkower, 2011), is too taxing in terms of attention and perception to allow for a simultaneous experience proper of the physical environment. It is a fact that the continuous reading of connected narrative belongs among the most complex processes the human mind is capable of accomplishing (e.g., Wolf & Barzillai, 2009). However, the conclusion that conscious experience of narrative reading prevents simultaneous experiences of the physical environment does not obviously follow from this fact. I will argue against such a conclusion on the basis of two simple observations borrowed from the philosophy of mind.

- a *There is more to immediate environment experience than what is in attention.*
- b *There is more to immediate environment experience than what is in perception.*

These observations, recently advocated by Schwitzgebel (2007), cannot be said to represent a mainstream philosophical view of phenomenal consciousness. Yet Schwitzgebel makes a persuasive case for them by reporting experimental evidence.

The present article aims to complement an approach to narrative reading frequently explored in communication studies and media psychology. This is an approach epitomized by the metaphor of *transportation*, wherein readers are not only assumed to engage in mental travel into distant imaginary worlds, but also become temporarily decoupled from their own world as part of the same process of transportation. In Gerrig's words, the reader "goes some distance from his or her world of origin, which makes some aspects of the world of origin inaccessible" (Gerrig, 1998, pp. 10–11). It is not entirely clear whether the "world of origin" refers to a physical place any more than it refers to the reader's beliefs, personal attitudes, and previous experiences. However, researchers drawing on Gerrig's account specifically make a point of suggesting that deep engagement with a story makes people lose "awareness of their surroundings" (Busselle & Bilandzic, 2009, p. 325). Psychometric instruments designed to measure narrative engagement and similar constructs feature items such

as “my body was in the room, but my mind was inside the world created by the story” (Busselle & Bilandzic, 2009, p. 329).

The metaphor of transportation has inspired groundbreaking research on issues such as narrative absorption, media enjoyment, or the persuasiveness of public narratives (for a review and meta-analysis, see van Laer, de Ruyter, Visconti, & Wetzels, 2014). Thus they have proven to capture essential elements of narrative response. Indeed, narrative reading is often practiced with the express objective to mentally escape from unpleasant environments such as crowded trains or waiting rooms. Even though this practice may have been truly widespread for just a couple of centuries, owing among other things to relatively recent developments in publishing technologies and personal mobility, it has taken over our folk imagery of reading entirely. The image of the reader as an insulated traveler is so powerful that even cognitive scientists who specialize in situated language processes (gestures, eye-movements, etc.) consider narrative fiction an exceptionally nonsituated form of language use due to its reference to imaginary worlds and supposed dissociation from the reader’s immediate environment (Spivey & Richardson, 2008; Zwaan, 2014). I will attempt to modify this latter view by pointing at how the physical environment can interact, in the reader’s consciousness, with the imaginary story world and other textual effects.

It must be noted that sound, empirically grounded theories of narrative reading extend beyond the transportation literature. There is no way to account for them all, or for their respective levels of compatibility with an environmentally situated approach to reading, in a single article. Instead of an introductory review of available alternatives to the transportation approach, a selection of the most potent alternatives (the aesthetic distance framework advanced by Cupchik et al.; the foregrounding framework advanced by Miall and Kuiken) will be cited with a view to highlighting their implications for the approach presented here. Unlike the transportation literature, however, none of these alternatives account for the physical environment explicitly.

The article is divided into three main sections based on three different, but largely compatible, perspectives on the role of physical environment in reading. First, there is the traditional notion that stimuli from the environment are a *distractor* with respect to one’s reading experience. Reviewing some of the research applications of this notion in the first section, I will reassess it in light of observation [a] as listed above: There is more to immediate environment experience than what is in attention. Two alternative proposals concerning the role of environment will follow from this reassessment. In the second section, I will propose that features of the reading environment can cross-fertilize with readers’ mental imagery. Providing different examples of this process, which I call *environmental propping*, I will elaborate on observation [b] as listed above: There is more to immediate environment experience than what is in perception. In the third section, I will propose that physical environment sometimes operates in concert not only with mental imagery, but also with the narrative experience more generally. On this proposal, physical environment can support or inhibit a narrative in eliciting aesthetic pleasure, beyond the baseline variables of distraction and bodily discomfort. I will argue that this may be the case for some narratives more

than others, depending among other things on the text-related variable of narrative complexity. Furthermore, I will argue that such *pleasure transfer* between a narrative experience and an environment experience can occur in both directions.

The article concludes with a fourth section outlining several implications for how narrative reading and comprehension could be taught, promoted, and investigated.

The environment as distractor

Speaking of different reading environments, attention and bodily comfort are perhaps the commonest concerns that spring to mind. Some environments, like rock concerts or other busy gatherings, are too distracting for most people to do any reading at all. This applies whether or not we find rock concerts pleasurable. These environments simply engage attention to a degree that is incompatible with the high attention demands posed by continuous reading. At this level, the idea of environment as distractor is uncontroversial.

Most natural environments where experienced readers choose to read, however, are much less intense in terms of extrinsic stimuli. The laboratory environments used in narrative response research are even typically thought of as free from extrinsic stimuli altogether. They tend to offer little in terms of pleasure, but are seldom outright distressful and do not necessarily prompt a spontaneous need to escape into imaginary realities. Still, experimental subjects do not naturally choose these environments for their reading. This is useful to keep in mind when assessing the role that physical environment has been assigned in empirical studies of readers' narrative engagement, transportation, absorption, and similar constructs. This role is purely negative, that is, one of distractor.

In the opening of this article I already cited one such psychometric item: "my body was in the room, *but* my mind was inside the world created by the story" (Busselle & Bilandzic, 2009, p. 329; emphasis mine). This item is part of the Narrative Engagement Scale, developed by Busselle and Bilandzic with feature film and television viewers but readily adopted in research on reading (e.g., Mangen & Kuiken, 2014). Narrative engagement is a construct comprising the four dimensions of narrative understanding, attentional focus, emotional engagement, and narrative presence. The above item belongs to the Narrative Presence Subscale, where narrative presence refers to the reader's sense of having entered the world of the story. The phrasing of the item suggests that in order for narrative presence to arise, the reader must become mentally dissociated from her immediate environment.

Another widely circulated instrument, the Transportation Scale developed by Green and Brock, features an analogous item. Transportation, defined as "an integrative melding of attention, imagery, and feelings" (Green & Brock, 2000, p. 701), is modeled to decrease to the extent that readers report being conscious of their surroundings. The exact phrasing of this reverse item is: "While I was reading the narrative, activity going on in the room around me was on my mind." (Green & Brock, 2000, p. 704) Drawing on Gerrig, Green and Brock comment: "the reader

loses access to some real-world facts in favor of accepting the narrative world that the author has created. This loss of access may occur on a physical level—a transported reader may not notice others entering the room, for example.” (Green & Brock, 2000, p. 702) The latest addition to the literature, the Story World Absorption Scale developed by Kuijpers, Hakemulder, Tan, and Doicaru (2014), is grounded in similar premises. The first item of its Attention Subscale, for instance, reads as follows: “The story gripped me in such a way that I could close myself off for things that were happening around me.” (Kuijpers et al., 2014, p. 109) Although none of these researchers explicitly claim that stimuli from the environment cannot, in principle, be experienced as value-positive, their instruments seem to exclude the possibility.

Being so immersed in a narrative as to fail noticing a person entering the room is one, rather common and often gratifying, thing. But is the reader’s attention, narrative presence, or overall aesthetic experience necessarily weaker if she does happen to notice? Or if she remains conscious of certain aspects of her environment throughout the reading session? Given the presumably uninspiring and unnatural character of the environments used in validating above scales, the researchers were probably right in operating on this assumption. Yet the general validity of the assumption is not evident. Consider for instance the following statement: “I used to love reading in the college church and in the stacks of the library. Also, at the fountain, because the constant sound of water had a soothing effect.” (Burke, 2011, p. 100) This statement was provided in an investigation conducted by Burke, who surveyed a population of college students on their reading habits and general attitudes to literature. The survey included the question whether it mattered to the students where they began reading a book that they have long been looking forward to reading, and if so, what their preferences were. Twenty-seven out of 36 respondents answered the first question affirmatively and a vast majority chose to elaborate in detail when answering the second question. Another typical answer went: “I read best when I am alone with some very soft music in the background, either in a comfortable chair or on the balcony in the sun.” (Burke, 2011, p. 100) Thus it seems that in natural reading environments, concurrent sensory stimuli do not necessarily interfere with the reader’s ability to attend to the text. They may even enhance the narrative experience overall.

Burke’s findings alone reveal little about the readers’ attention and consciousness in the course of reading. One could speculate that these readers do not really hear the sounds of water or music except in moments when their reading is interrupted. Since cognitive scientists agree that reading does not allow for divided attention of the kind observed in multitasking (e.g., listening to the news while folding laundry; see e.g., Murphy Paul, 2013; Wolf & Barzillai, 2009), these readers’ choices of places to read could thus be guided solely by a preference for what they will likely experience once their attention drifts away from the story. On this view, one that seems to underlie the psychometric work reviewed above, the two notions of attention and consciousness would be synonymous and interchangeable. There would be no way of saying “activity going on in the room around me was on my mind” without implying that one was actually paying attention, if briefly, to such activity. There is, however, an alternative

view of the relationship between attention and consciousness. This view is expressed in observation [a]: There is more to immediate environment experience than what is in attention.

On this latter view, people reading to the sounds of water or music *can* be continuously or at least intermittently conscious of these sounds (or any other sensory aspects of their environment), while at the same time staying fully focused on their reading. Note again the difference from what is known as multitasking. Multitasking is the perfect timesharing of attention between two simple purposeful activities (Schumacher et al., 2001), whereas here the concurrent sounds of water or music never receive attention proper. Instead, they occupy what may be called the periphery of the reader's consciousness. Evidence supporting this view has been produced by Schwitzgebel (2007). Schwitzgebel's investigation was motivated by a long-time philosophical dispute about the nature of human consciousness. Some philosophers, proponents of the thin account of consciousness (e.g., Dennett, 1991), argue that the scope of our consciousness is strictly constrained to what is in the focus of attention. Others, proponents of the rich account of consciousness (e.g., Searle, 1992), claim that our consciousness is invariably flooded with peripheral experience of unattended stimuli, such as the softness of a chair in which we are reading, the cutaneous sensation of heat on a sunny balcony, the soothing sounds of water or music.

Schwitzgebel proceeded as follows: He made subjects wear beepers during a few days of mundane activity in their natural environment. At random intervals, a signal from the beeper told the subjects to register their experience as it felt in the very instant preceding the beep. Assigned to several groups each receiving slightly different instructions, the subjects then reported different aspects of their experience, some of them reporting on the peripheries of their tactile or visual experience specifically (having vs. not having sensations in the left foot or far right visual field). Importantly, Schwitzgebel's findings warrant neither an exclusively thin nor an exclusively rich account of consciousness, but rather a third, moderate account; *all* participants in his study reported instances of absent peripheral experience as well as instances of more or less ample peripheral experience. In other words, depending on the circumstances, phenomenal consciousness seems to alternate between a thinner and a richer set. Sometimes it is limited to the object of our focal attention. Other times it encompasses more than that, including features of the environment that are not directly related to the focal stimulus or task at hand.

From the way the study was set up, it is impossible to tell whether the reported instances of rich experience were not really instances of rapid task switching, that is, a flipping back and forth of focal attention. Yet this is irrelevant as the goal of the study was to investigate first-person experience rather than the underlying psychophysiological mechanisms. If subjects reported two experiences, a focal and a peripheral one, to have occurred simultaneously, then the experiences *were* simultaneous. Following are the possible implications of these findings for the activity of reading, generally speaking: While the relatively high attention demands of reading are well beyond dispute, sensory stimuli from the environment can still inform a reader's consciousness

without necessarily disrupting the reading experience. It should be stressed, however, that this applies only to very basic stimuli (nonverbal sounds, smells, tactile sensations, etc.) unrelated to a more complex parallel activity (e.g., listening to the news).

The variables underlying this alteration between thinner and richer consciousness are probably many and diverse. Most of them, for example, the individual reader's long-term and short-term dispositions, will need to remain unaddressed in this article. As for the particular role of physical environment, I have previously suggested that laboratory settings may be more likely than natural environments to instigate a thin mindset, wherein subjects screen off any aspects of their experience that are not related to the experimenter-imposed reading task. Consequently, environment experiences occurring in the course of an experiment may be more likely perceived as distracting than analogous experiences occurring in a more natural setting.

I will return to the general variable of environment later as I will discuss it in conjunction with the text variable, proposing that certain types of text may be more environment-sensitive than others. In the next section, however, I will first propose how environment consciousness can enhance one's reading experience at the more specific level of mental imagery. I will describe a process of *environmental propping* wherein distinct text effects in the reader's consciousness are reinforced precisely by the reader's peripheral experience of the environment—rather than by a sense of dissociation from this environment as suggested by established theories of narrative engagement, transportation, and absorption. Environmental propping is the first of the two alternatives to the traditional view of environment as plain distractor.

The environment as a prop for mental imagery

Consider the following scenario: You are reading *Heart of Darkness* by Joseph Conrad, a story set on a steamer afloat the Congo River. As you read, the sound of water from a nearby fountain reaches every now and then your peripheral consciousness. Rather than distracting you from conjuring mental images of the story world, it makes the story world more salient in your imagination. *Vice versa*, the author's descriptions of the Congo make you more acutely, albeit peripherally, conscious of the sound of water in your own physical environment. In a process of mutual propping, your auditory perception of real water merges with your auditory, visual, or multimodal (Kuzmičová, 2014) mental images of a river plowed by a 19th-century steamer. Thanks to this propping, a sense of narrative presence arises more easily than in a random environment, should this environment be somehow contrastive (a busy airport lounge) or more or less neutral (the quiet of your home) in relation to the story world.

This example of environmental propping is clear-cut, yet rather atypical in its clarity. It is atypical because continuous reading of long-form text happens to be not only attentionally, but also perceptually taxing. It is true that exteroceptive modalities additional to hearing can also provide real-time information on the environment during

reading, most notably the modality of touch. For instance, reading *Heart of Darkness* in a climate resembling that of the Congo leaves ample room for environmental propping through the cutaneous sensations of heat and humidity. (While reading it in the Arctic may, at least for readers longing after warmer climates, also elicit special effects in the tactile domain of mental imagery.) However, since a reader's body is largely immobile, the possibilities of tactile environment exploration remain limited. The sense of smell, finally, may be involved in environmental propping as well, but this modality is relatively marginal to how humans relate to their environment.

The main reason why the activity of reading leaves us largely perceptually impoverished is that vision, the single sensory modality most important to environment exploration, is blocked. The reader's eyes are busy scanning the printed page, with an insignificant periphery to rely on when it comes to the environment. Let us assume that in the *Heart of Darkness* scenario, an audible fountain is capable of environmental propping despite its overall dissimilarity from the Congo River. Does the reader's visual handicap entail that an actual yet *inaudible* river lined with tropical wilderness, all potentially within sight, would lack the same capacity of propping? Observation [b] as listed in the opening of this article will help us explicate why this might not be the case. The observation reads: "There is more to immediate environment experience than what is in perception."

Observation [b] is probably less controversial than observation [a] but it is worth dwelling on for clarity. Let us consider the polar opposite of rich consciousness *vis-à-vis* a given perceptual stimulus, for example, the sound of water as it appears to you when you actively explore a fountain. This polar opposite would consist in complete oblivion, of your not noticing that there is a fountain in front of you, and tripping over it. Now let us posit a gradient scale of environment consciousness between the two poles, with absolute nonconsciousness at one end and a replete perceptual experience at the other. The next level on the scale may then be represented by situations when you know (or even see) that there is a fountain but are still too distracted to avoid tripping over it. The next level after that, finally, is where the scale becomes relevant for the role of environment in reading. This is a consciousness level that Schwitzgebel (2007) calls *epistemic awareness*.

Schwitzgebel gives the following example of epistemic awareness: Epistemic awareness of moving cars and traffic lights is what regulates the overt behavior of an experienced driver whose mind is fully engaged in daydreaming. The driver is able to reach her destination without having an accident and yet does not remember perceiving any cars or traffic lights. While she was epistemically aware of her surroundings when she drove, she did not consciously perceive them. The relevance of such a notion of epistemic awareness for our *Heart of Darkness* scenario, the River version, can be summarized as follows: Unperceived and imperceptible stimuli in the environment can regulate our behavior. That is, as long as a reader knows, at some level, that there is a river lined with wilderness potentially within sight of where she is reading, this knowledge alone has the power to prop her mental imagery of the Congo River as called forth by *Heart of Darkness*.

Schwitzgebel is careful to present the distinction between epistemic awareness (of an unperceived stimulus) on the one hand and conscious experience (of a perceived stimulus) on the other as categorical, separating mere overt behavior from inner experience proper. However, the workings of a reading (as compared to driving) consciousness may be better captured in scalar than in categorical terms, because during reading there is virtually no overt behavior. Any effect of environmental propping, for instance, can typically be observed in inner experience only. In this respect, the presence of an unperceived prop (e.g., a river) in the reading environment is somehow always sensed through its effect on conscious experience (a vivid mental image of a river) as well as epistemically grounded.

In a narrative so complex as *Heart of Darkness*, relatively little is at stake if the reader fails to form a mental image of the Congo River specifically, although such an image certainly contributes to narrative presence (Kuzmičová, 2012), adding to the overall intensity and ideational impact (Green & Brock, 2000) of the reading experience. Yet in other narratives, environmentally propped mental imagery can make a more significant difference. Mental imagery and narrative presence are closely related to readers' affective responses (Krasny & Sadoski, 2008). Narrative genres tapping more directly into basic affects, for example, thrillers or horror stories, may thus depend on mental imagery to a higher degree. For instance, imagine reading *The Shining* by Stephen King, the famous horror novel set in a hotel in the Rockies, and being just a stone's throw away from a mountain resort. Most likely you do not need to be able to see the resort, or give it an articulate thought as you read, for its proximity to inform your level of horror via environmentally propped mental imagery.

The idea that the reader's mind always works toward a perfect fit between text cue and mental image is of course a simplification. All the above scenarios account for a sort of mental imaging that stays close to the text, abstracting from the reader's idiosyncratic life experiences. For the sake of simplicity, I have omitted an entire domain of reading experience where text cues serve readers to revisit personal memories of specific life episodes rather than guiding them into an abstraction from themselves. The two domains of reading experience—the text-oriented and the self-oriented responses—have been described to operate in productive tension, with possible biases toward one or the other based on text type and other variables. For instance, Cupchik, Oatley, and Vorderer (1998) found that narratives explicitly portraying complex emotions tend to elicit more self-oriented responses (i.e., emotional memories) than less emotional narratives, which elicit a greater proportion of text-oriented responses (i.e., emotions corresponding to those of story protagonists). Cupchik et al. suggest that self-oriented responses are facilitated by what they call *aesthetic distance*, that is, the reader's instantaneous ability to step outside the story world. Their study also shows that aesthetic distance can be induced through reading instructions.

Let us briefly adopt the distinction between text-oriented and self-oriented responses for the realm of mental imaging. To a reader lacking first-person sensory

experience of the Congo, a text-oriented image prompted by Conrad's narrative would correspond to some shared stereotype of equatorial landscape. Meanwhile, a self-oriented image may for instance involve the reader's sensory memories of an exciting boat ride on the River Thames, despite her knowledge that the scenery of *Heart of Darkness* must be dissimilar from England. Both types of imagery can hypothetically be reinforced via environmental propping, but a random current environment probably cannot compete with emotion-laden memories of highly dissimilar past environments. That is, where such sensory memories are elicited, environmental propping may be overridden.

Environmental propping is not the only process wherein the narrative experience of a silent reader is affected by her peripheral consciousness of the immediate environment and *vice versa*. The next section will offer yet another perspective on reading as an environmentally situated activity. This time, the mutual link between narrative and environment will be described in the more general terms of aesthetic pleasure.

The environment as a locus of pleasure

People expose themselves to long-form narratives, especially fictional ones, for a variety of reasons. The notions of narrative engagement, transportation, and absorption, all mediated by a sense of having entered an alternative reality and alternative experience, are central in defining the gratification sought in leisure reading. In addition, many readers seek, and most of them end up facing, challenges to their established worldviews and beliefs when they read narratives, an aspect of narrative reading that reportedly also is correlated with mental imagery (Green & Brock, 2000). However, narratives do not only offer worlds to imagine and worldviews to ponder. They are unique in imposing aesthetic form onto experience, and can thus be perceived as formal wholes each affording a certain degree of aesthetic pleasure that is strictly reducible to neither world nor worldview.

Aesthetic pleasure is the instant joy, or sense of beauty, triggered by a stimulus and experienced without intermediate concern (Berlyne, 1963). This immediacy distinguishes aesthetic pleasure from the more complex notion of enjoyment as known among media psychologists, who define enjoyment as an attitude toward an elapsed narrative experience rather than its intrinsic feature (Kuijpers et al., 2014). Importantly, aesthetic pleasure can inhere in most types of experience other than reading, however primitive, including one's immediate experience of a physical environment. People read, work, and live better in esthetically pleasing environments. There is no need to cite Burke's survey again in order to support this obvious claim. The present section aims to go beyond the obvious on two points:

Firstly, I will propose that the link between overall pleasure from environment and overall pleasure from narrative can operate in both directions. That is, not only do readers generally get more out of their reading in pleasing environments. In what I tentatively call *pleasure transfer*, environments may sometimes be perceived as more

pleasing precisely by virtue of reading. This is why it seems more accurate to speak of the environment as a *locus*, rather than a source, of pleasure in reading.

Secondly, I will explore the idea that the need for pleasure from the environment may vary, among other things, from text to text. In other words, not all books are equally environment-sensitive. More specifically, I will focus on the variable of narrative complexity, proposing that, from a certain level of complexity, the need for pleasure from the environment increases with complexity. That is, while medium complex narratives may have the capacity to generate pleasure in many different environments, highly complex narratives may require more pleasing environments. I will further suggest that narratives below a basic level of complexity, by contrast, may be incapable of generating pleasure apart from situations when pleasure from the environment is subnormal, for example, during travel.

Let me elaborate on the first point. How are narrative and environment mutually connected on the more general levels of overall aesthetic pleasure? Compare for example the following two situations: In the first situation, you are reading *Heart of Darkness* in a dull hotel room, killing time before you will have to travel on. In the second situation, you are reading *Heart of Darkness* in a romantic garden on your day off. For any narrative reading session, countless factors such as your existential concerns, instantaneous mood, motivation to read and so forth, play into your overall experience. Many of these factors are likely to differ between the two above situations, adding to what makes reading situated in one sense or another. But should we consider the difference between the two situations in terms of environmental situatedness only, the following may be observed:

In the Garden version of the *Heart of Darkness* scenario, two pleasing experiences combine. The focal experience of reading gives you a certain amount of pleasure, and so does your peripheral experience of the environment. Unless the garden is extremely enticing to the point of distraction, it likely reinforces the pleasure you take in *Heart of Darkness*. In the Hotel version, on the other hand, there is not much pleasure to be drawn from your environment experience. What may occur, however, is transfer in the opposite direction. That is, your reading experience not only alleviates unpleasant aspects of your environment experience, it can also make you (peripherally) experience the hotel room as a nicer place to be in.

Such pleasure transfer differs from situations when a narrative is read to insulate oneself from outer stimuli and when the environment ceases to be experienced more or less entirely. Rather, it could be likened to some of the salient experiences described by portable audio player users. Surveyed by Bull (2007), a population of portable audio player users reported that an audiobook or piece of music played through a headset allows them to literally project aesthetic pleasure onto environments (e.g., crowded urban settings) where none would be found otherwise. Although books do not leave as many possibilities for simultaneous environment perception due to their blocking of the reader's vision, there is no reason why they should not, in principle, afford similar projections of aesthetic pleasure onto the environment. This kind of transfer is hypothetically possible in the Garden version of the *Heart of Darkness*

scenario as well, although it may not be as clearly experienced as in the Hotel version. In any conceivable situation, finally, the aesthetic pleasure taken in a narrative will likely affect the way the reading environment is later remembered, and *vice versa*.

The notion of pleasure transfer explained, the other main idea of the present section is that not all narratives are equally environment-sensitive. While some books can be read with pleasure virtually anywhere, others have to wait until the circumstances are somehow felt to be adequate. Differences between individual readers aside, the mediating factors in this variation are probably many. I will only focus on the variable of narrative complexity. Narrative complexity is always relative to an individual reader's expectations, but it is also measurable objectively. For instance, a narrative featuring multiple plotlines and points of view, uncommon figures of speech and vocabulary, essayistic digressions on metaphysical topics, and subtle cultural references displays a higher degree of complexity than a more straightforward narrative lacking these features.

There is convergent evidence supporting the view that stimulus complexity has an important role to play in the generation of aesthetic pleasure. In the study reported by Cupchik et al. (1998), emotionally complex narratives received higher pleasure scores compared to more straightforward materials. However, greater complexity does not always entail more pleasure. Berlyne (1963) famously conducted a series of experiments manipulating the complexity of an array of visual stimuli. Subjects were asked to provide ratings of these stimuli concerning, among other things, the pleasure and interest evoked. While interestingness ratings increased linearly with complexity, pleasure was related to complexity by an inverted U-shaped function. That is, relative complexity was rated as more pleasing only up to a point, after which it affected pleasure negatively.

Outside the domain of aesthetics, a similar theoretical proposal has been put forward concerning the notion of media enjoyment. Using computer games as an example, Sherry (2004) suggests that enjoyment follows from a balance between an individual's abilities on the one hand and the cognitive challenges posed by a particular stimulus (e.g., a game) on the other. According to Sherry, enjoyment—mediated by the experience of *flow*, that is, a state of complete immersion as occurring in any type of focused activity—is absent when the challenge is either too small or too great. In aesthetic activities such as reading, flow/enjoyment and pleasure may thus be expected to covary due to stimulus complexity, with optimal cognitive (flow) and aesthetic (pleasure) balance arising at medium complexity levels for most individuals. Moreover, flow-eliciting activities are defined in the literature to be “intrinsically rewarding” (Sherry, 2004, p. 332), a quality possibly coinciding with aesthetic pleasure.

With regard to narrative aesthetics, the intuitive appeal of Berlyne's and Sherry's proposals is obvious. They help explain why narratives of medium complexity (e.g., *The Shining*) may be pleasurable to most types of readers, while extremely complex narratives (e.g., James Joyce's *Ulysses*) are spontaneously pleasing to almost nobody. For the sake of adapting them to an environmentally situated framework, let us

consider three different narratives each representing a different level of narrative complexity: *Heart of Darkness*, for instance, may represent the higher end of the complexity spectrum. *The Shining*, then, may stand for a medium complex narrative. At the lower end of the complexity spectrum, let us consider a subliterary narrative product, the B/C-thriller.

Imagine now the following situation: You are on a crowded train, with hours of travel ahead of you. You are going on vacation and you have brought *Heart of Darkness*. After a half-hour of struggling to stay on task, you realize that reading this particular book in this particular environment is a lost cause and you put it aside. You simply could not take in the narrative, even though the level of noise may be no greater than the level of noise at your local coffee shop, where you often read books of similar complexity. But luckily someone can lend *The Shining*. This one is easier to get into and you are spared long hours of boredom. In an instance of pleasure transfer, you may even begin to experience the ride itself as a real thrill. Later, when a group of noisy passengers turns up across the aisle, *The Shining* helps you close yourself off for what is happening around you, that is, to transition from a relatively rich mode of consciousness to a thin one.

Alternatively, imagine that your travel companion forgot *The Shining* at home and can only lend the B/C-thriller. To you, this is at first sight a narrative totally lacking in appeal. You hesitate. Later, given the distress caused by your new neighbors across the aisle, you accept the offer. Relative to the prospect of having to overhear each and every word they say, the B/C-thriller turns out all right. It even makes you forget about your surroundings altogether. Like the B/C-thriller, many narratives that are normally both unpleasant and uninteresting due to extremely low complexity can generate pleasure when they offer a route of escape from extremely unpleasant environments, largely by instigating a more or less thin mode of consciousness—a rule that seems to inform the programming choices in much of onboard entertainment (see also Green, Brock, & Kaufman, 2004, p. 321).

Finally, let us return to *Heart of Darkness*. You have reached your destination now and are dwelling in a place that is as pretty as it is peaceful, for example, a cabin in the woods. Quickly you finish *The Shining* and move on to *Heart of Darkness*. What seemed impenetrable on the train presents you now with a perfectly pleasing reading experience. Although *The Shining* as read at destination might also have seemed slightly better than the parts read on the train, the pleasure and suspense it generated was still comparably stable across the two environments. But what happened between the Train and the Cabin version of the *Heart of Darkness* scenario? Why should highly complex narratives be more environment-sensitive than medium complex ones?

Several explanations avail. To begin with, there are at least two different explanations implied in the view that the environment affects reading experience primarily in its capacity of a distractor. The first of these explanations reflects the traditional assumption that attentive reading is preconditioned by a thin mode of consciousness, wherein nothing can enter one's reading experience without simultaneously becoming the focus of attention. On this explanation, highly complex narratives simply require more focal attention for the sake of baseline understanding than medium complex ones, thus being more vulnerable to distraction, of which there is more on a crowded train compared to a forest cabin.

The second explanation based on the distractor account of environment opens for an alternative, moderate understanding of consciousness as advocated by Schwitzgebel—that is, for the understanding that the scope of conscious experience is not always limited to the contents of focal attention. On this explanation, highly complex narratives may elicit, as a rule, a richer mode of consciousness than medium or low complex narratives. Such an explanation is partly warranted by the theory of *foregrounding*. A notion extensively explored by Miall and Kuiken (1994), foregrounding amounts roughly to the usage of deviant linguistic structures and is as such an important factor in narrative complexity. In a number of experiments, foregrounded versions of narratives have been found to activate the reader's mind on a broader array of simultaneous processes than their nonforegrounded counterparts. Next to effects corresponding to narrative engagement, transportation, and absorption, foregrounded narratives have proven to elicit, for example, a greater degree of real-time conceptual reflection, emotion, and generally self-modifying experiences (e.g., Miall, 2006). Miall and Kuiken's notion of foregrounding clearly ties in with the notion of aesthetic distance. Similarly to the strongly emotional narratives used by Cupchik et al. (1998), foregrounded texts generally prevent readers from plain absorption in the story world, thus increasing aesthetic distance. Now, if a highly complex narrative is capable of broadening readers' consciousness of what is happening within them, it may hypothetically broaden their sensitivity to what is happening around them as well, that is, to stimuli from the physical environment. Again, readers would then be more susceptible to distraction (but also to environmental propping).

Finally, there is a third explanation of the difference in environment-sensitivity between medium and highly complex narratives. This explanation puts the notion of distraction aside. Instead, it is based on the idea that physical environment serves as a locus of aesthetic pleasure. Let us go back to the exemplary comparison. It is a comparison between two narratives, but also between two environments. Firstly, if Berlyne's conclusions are applicable to narrative, *The Shining* can be expected to score higher on aesthetic pleasure, but lower on interestingness, than *Heart of Darkness*. *Heart of Darkness* in turn may be rated as more interesting but generate less immediate pleasure, despite the enhancing effects on consciousness presupposed by the foregrounding framework. Secondly, between the two environments, the crowded train affords less aesthetic pleasure than the forest cabin. With respect to the reading

experience proper, the first type of aesthetic pleasure may be considered intrinsic, while the second, environmental, type of pleasure is extrinsic.

Now let us briefly consider the role of pleasure in reading. Hedonic responses are often downplayed in experimental research where higher aesthetic values, such as the complexities of *Heart of Darkness*, are at stake (Vorderer & Roth, 2011). Instead, complex texts and other media products tend to be primarily studied from the viewpoint of additional, higher-order responses, such as insight (Miall & Kuiken, 1995) or appreciation (Oliver & Bartsch, 2010). However, it is implausible that aesthetic pleasure could ever be wholly irrelevant to the key decision taken in the early stages of any natural reading session, that is, the decision between continuing to read and letting go. On the train, you gave up on *Heart of Darkness* because the book did not generate enough intrinsic pleasure to keep you going, given the effort spent on comprehension. *The Shining*, on the other hand, had enough intrinsic pleasure to offer. What happened to *Heart of Darkness* once you arrived in your destination, then, was that intrinsic pleasure was partly compensated for by extrinsic pleasure, tipping the scales of overall aesthetic pleasure toward continued reading. It is in this sense that highly complex narratives should be considered more environment-sensitive on account of pleasure rather than on account of distraction.

It is important to stress here that the three explanations of environment-sensitivity in complex narratives are not mutually exclusive but complementary. The processing of highly complex stimuli arguably requires more effort and is thus more vulnerable to distraction. When this processing happens to occur in a thin mode of consciousness, any environmental stimulus, if it is noticed, captures the reader's focal attention. Because of the attention demands posed by the sheer activity of reading, the reader then likely interrupts her reading rather than dividing her attention between the text and the outer stimulus. When reading occurs in a richer mode of consciousness instead, there is a greater risk of an outer stimulus being peripherally noticed to begin with. Finally, the increased effort required under both mindsets (the thin and the rich one) decreases intrinsic pleasure, therefore calling for extrinsic compensation from the environment. The final section will conclude with the practical implications of the ideas presented here while continuing to tackle their mutual complementarity.

Conclusion

An environmentally situated account of reading has implications for at least two different domains of activity: the practice of narrative reading as such, on the one hand, and experimental research, on the other. Let us begin with the primary concern, that is, natural reading practice, particularly from the viewpoint of literacy instruction and promotion. This article has presented the reading environment in its three distinct capacities of distractor, imagery prop, and locus of pleasure. While the three perspectives are compatible at large, their practical affordances can partly be at odds with each other. For instance, schools and libraries make

efforts to eliminate distraction, particularly in the form of auditory stimuli. To the extent that material conditions avail, they also aspire to offer (visually) pleasing interiors. But the total quiet and rigor of a classroom or reading room, however beautifully designed, is not necessarily all it takes for an environment to serve as an instantaneous locus of pleasure. Some of the respondents in Burke's (2011, p. 100) survey, for example, report a certain preference for auditory stimulation during reading.

If highly complex narratives are the ones most dramatically endangered by the contemporary decline in reading skills (Wolf & Barzillai, 2009), literacy practitioners such as teachers or librarians could capitalize on the insight that these narratives can be particularly environment-sensitive. For example, they could expressly encourage struggling readers to actively search for a fit between book and environment, and to do so by primarily trying to change environment, not book. Fostering the self-knowledge and discipline required for such manipulations is especially important at a time when digital technologies allow readers to carry around entire libraries instead of just single volumes, and when readers can easily switch the contents in their e-reader to ever-decreasing levels of complexity. While the storage capacity of electronic devices is a clear advantage for the experienced reader who has temporarily fallen victim to noisy fellow travelers, enabling her to adapt to adverse environments, it could make things dangerously easy for beginning readers. Aside from conscious adjustments or variations of reading environment, reading skills could also be enhanced through artificial environmental propping. In class, early readers could be exposed to sensory (auditory, tactile, olfactory, etc.) stimuli corresponding to the settings of a narrative they read. This may yield special benefits for the comprehension of narratives set in distant regions and cultures that would otherwise not, or inadequately, inform their mental imagery.

The idea of artificial staging, finally, brings us to the domain of experimental research. Environment manipulations for educational purposes should ideally be preceded by pilot tests in authentic classroom or reading room environments. More subtle experimental designs, probing the overall validity of the moderate account of readers' consciousness presented here, could also be implemented in such semiformal settings, for example, by way of introducing unrelated peripheral stimuli of varying kind and intensity. However, the most natural consequence of adopting an environmentally situated approach to reading would be to move the experiment outside controlled settings altogether. For a more naturalistic reading experience, subjects could simply take the narratives to their preferred environments and even submit their data from there. As a next step, environments could be varied within the course of a study. Most types of self-report data, such as those underlying the psychometric studies cited in this article, could still be collected with relative reliability.

Most importantly, the physical environment may not only serve as yet another independent variable possibly affecting narrative engagement, transportation, or absorption outcomes as measured today. Its inclusion in the observed range of experience would enable entirely new types of self-report. For instance, if subjects

are free to locate their preferred fit between narrative and environment, it will be easier to have them read, and to read more naturalistically, longer stretches of narrative at a time. In such a naturalistic setup, they could also be asked questions explicitly targeting their environment experience. Although a qualitative method may be better suited for collecting this type of data, quantitative experiments could easily include a limited array of relevant questions, for example along the following lines: “The chosen environment enabled me to forget about my physical situation altogether.” or “The chosen environment affected me in consonance/dissonance to the feelings/images/reflections prompted by the narrative.”—Agree/disagree on a scale.

Such research would advance our understanding of what sustains the pleasure people naturally take in reading, but also what makes them put a narrative away. The latter issue especially is becoming critical as more and more young people resent the efforts made by schools and other institutions to help them build up a solid reading habit. The possibilities of finding effective solutions within a nonsituated framework of reading are, however, limited.

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