Vladimir Nabokov's *Pale Fire:* The Lost 'Father of all hypertext demos'?

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ABSTRACT

In 1969, Ted Nelson worked with IBM at Brown University on an early hypertext system, during which time he gained permission to use Vladimir Nabokov's highly unconventional and hypertextual novel, *Pale Fire* (1962) as a technical demonstration of hypertext's potential. Unfortunately, the idea was dismissed, and thus never demonstrated publicly. This paper re-considers *Pale Fire*'s position in hypertext history, and posits that if it *was* used in this early hypertext demonstration, it would have been the 'father of all hypertext demonstrations' to complement Douglas Engelbart's 'Mother of All Demos' in 1968. In order to demonstrate the significance of *Pale Fire*'s hypertextuality and Nelson's ambitions to use it, this paper will explore its hypertextual structure, the implication thereof for the novel and evaluate its success as a hypertext compared to electronic systems.

Categories and Subject Descriptors

H.5.4 [**Information Systems**]: Hypertext/Hypermedia – *architecture, theory.*

General Terms

Theory.

Keywords

Hypertext, Narrative, Structure, Literature, Vladimir Nabokov, Ted Nelson, Intertextuality.

1. INTRODUCTION

The title of Douglas Engelbart's famous 'Mother of all demos' [11] evokes a paradigm shift in computer science, and hypertext development especially. Ted Nelson's *Xanadu* project would have had a similar defining moment when Nelson gained permission to use Vladimir Nabokov's recently published novel, *Pale Fire,* when working with IBM at Brown University in 1969. [24] Nabokov's novel takes the form of a poem with its commentary. The commentator's agenda, however, is purely egotistical rather than elucidating difficulties and points of interest within the poem, thus perpetually increasing the autonomy and authority of his commentary over the poem. The commentary creates the explicit hypertextual structure of the text through the links to other parts of the poem and commentary; this is supplemented by what Nelson called 'parallel documents', [25] or what is commonly referred to in literary theory as 'intertextuality'[1], [18] whereby references and allusions are made to external texts, usually literary. Unlike most hyperlink practices, however, intertextuality does not involve a specific marker for the linking, thus the reader has to recognize the connection and normally, its significance to the text. It is true, however, that many hypertextual tropes are present within the novel, including several Nelson yearned for, particularly because the World Wide Web, as a populist hypertext, does not have mainstream support for these features so far. Thus, outside of hypertext specialists, people are largely unaware of these more advanced and useful features. This paper will argue that Nabokov's *Pale Fire* anticipates some of Nelson's most pressing concerns regarding hypertext and even contains complex networks akin to the work of Albert-László Barabási. [3] These hypertext features will be assessed in terms of their effect on the novel, and also how *Pale Fire* can be seen as a particularly effective hypertext.

1.1 Summary of *Pale Fire*

Pale Fire consists of four major sections, contributed to two main fictional authors, both vying for the reader's attention, albeit one has the advantage of editing the other. The centerpiece of the novel is the late John Shade's final and greatest poem, 'Pale Fire', a 999-line autobiographical treatise on life and death, channeling one of the main themes of Nabokov's fiction. This is overshadowed by a corresponding foreword, commentary and index, supplied by Charles Kinbote, Shade's apparent preference for chief editor and annotator, a fact that quickly becomes questionable and by the novel's conclusion, quite untenable. The text is confused further by paratextual devices [13] such as an epigraph that connects to the main text in such a way that the reader can attribute the quotation to the agenda of either Shade or Kinbote. [28] Advocates of the various schools of authorship have fiercely debated the novel since it was published almost fifty years ago, with commentators predominantly suggesting that either

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[1] 'Intertextuality' is also interesting because Kristeva employs metaphors of 'x-' and 'y-axis', evocative of theorizing text as spatial, in a similar way to hypertext theory using the spatial imagery of graph theory.

Kinbote or Shade actually authored the entire novel [see 7 for a summary]. In this process, the same quotations have been used repeatedly to assert the validity of various theses, thus highlighting the text's highly volatile and indeterminate state.

What is actually known about the plot, given the problems of authorship, consistency and Nabokov's tendency to challenge causality through hypertext, [6] is relatively little, with three major layers running through the text with varying degrees of believability. Firstly, John Shade writes 'Pale Fire' to come to terms with the afterlife, understand the death of his daughter and reaffirm his love for his wife. The second layer is the story of the commentator, Charles Kinbote, who believes he is the excommunicated King Charles II of Zembla. His life is in danger from assassination by a group called 'The Shadows', although Kinbote is more than likely just Professor Botkin, a delusion outcast teaching at the same university as John Shade. Botkin probably dreamt up Zembla, and therefore the bulk of the commentary rather than focusing on the poem. The third motif running through the text is the reported death of John Shade[2] at the hands of a madman Jack Gray, alias Gradus, one of 'the Shadows', in Kinbote's narrative, either avenging his imprisonment by killing the man who sent him to prison, instead hitting Shade, or the bumbling assassin who hits the poor poet rather than the king-in-hiding. Critics have asserted that potentially this may all be in either Botkin or Shade's head, and the whole novel is a product of their imagination [see 2, 9, 30 and 31 for a small selection of arguments for either case]. Therefore, it can be difficult to identify the most plausible and stable narrative in the text.

2. LITERATURE REVIEW

2.1 The Convergence of Literature and Hypertext

Although there were parallel developments in World Literature and Computer Science, from the 1960s onwards, fitting the status of Nelson's hypertext as 'non-sequential reading and writing',[3] [24] it was in the utopian early period of Internet and hypertext studies [33] in the late 1980s onwards that a flurry of literary hypertext theory appeared, thus renewing interest in the ur-hypertexts of the mid-Twentieth century authors' experimentation, as well as focusing on new developments in 'hypermedia' systems such as EastGate's 'Storyspace' and hyperfiction, most famously Michael Joyce's 'afternoon'. Most of this discourse continued to follow new developments regarding computerized hypertext systems on the World Wide Web and even splinter discourse onto narrative in computer games [1], and these examples of hypertext in print media mainly became novelties for literary theorists to demonstrate features usually displayed by more complex electronic systems and are thus briefly discussed but not technically analyzed within any formal structure developed to explore hypertextual narrative. N. Katherine Hayles counters this, suggesting that the book can allow more freedom than its representation on a computer screen through its physicality. [16] Furthermore, a form of hypertextuality was a more common type of textuality in the pre-Gutenberg time, when most texts were very reflective and self-referential. [12] Moreover, pre-Gutenberg, there was less emphasis on authority as the content of a text was more important than its author, something that has once more become more relevant considering authorship on the World Wide Web.

Furthermore, I believe that hypertext does not refer predominantly to a textual structure, but rather a methodology of reading beyond the linear passage of the text. One has to 'escape' the one-dimensionality of the text in order to interpret the text in any manner of ways beyond the simple words on the page, including connecting it to the social, political or economic network as three common examples. There is evidence for this in the language of post-structuralism and reader-response theory, with theorists such as Roland, Barthes, Jacques Derrida, Wolfgang Iser and Michel Foucault using language evocative of hypertext when referring to print-based media. [19] In fact, the post-structuralist agenda led to this splintering of potential readings, rather than the earlier goal of purely finding the 'correct' meaning inherent within the text. It is the reader's choices in reading the text and their connections that inform their own interpretation of the text, very similar to how people choose hyperlinks in order to form their own interpretation of a hypertext system.

2.2 *Pale Fire* as hypertext

There has been considerable discourse on *Pale Fire* as an example of hypertextual literature, with many canonical texts of literary hypertext theory citing it as a milestone for literary hypertext development [1, 19, 24, 28]. These critics suggest that the structural elements of the novel are equivalent to that of a hypertext, often ignoring the implications of Nabokov using this structure, as well as not considering the more subtle hypertextual tropes present within the novel, just looking at the hyperlinks. Espen Aarseth describes *Pale Fire* as interesting because it is both uni-cursal and multi-cursal, highlighting the fact that critics do not have to consider the hyperlinks in the novel to read the novel. [1] Some more traditional scholars have not embraced this choice, however, with Neil Isaac asserting the authority of the linear reading, suggesting reading the text otherwise would equate to lunacy equal to Kinbote! [17] Thus, Nabokov's novel is not universally seen as hypertext, despite the overwhelming usefulness of reading *Pale Fire* hypertextually.

It might be puzzling that Nabokov's novel is following a tradition of hypertextuality, using annotations as part of the artistry of the text rather than simple gloss, which can be seen as early as *I Ching* [1] and the Talmud, through the Medieval ages in their meditative dream-texts, [12, 16] the Eighteenth Century with Alexander Pope's *Dunciad Variorium*, and the early-Twentieth century with the 'wild goose chase' within the footnotes of T.S. Eliot's opus, *The Waste Land.*[4] [10] The emphasis on *Pale Fire* as a catalyst requires that we establish why it represents a

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[2] If one believes Shade constructed the whole novel, his death is of his own creation, thus both the second and third narrative are highly unstable.

[3] See Vladimir Nabokov's *Pale Fire*, Julia Cortazar's *Hopscotch*, B. S. Johnson's *The Unfortunates* for examples of World Literature channeling the same spirit as hypertext just in the 1960s and [1, 19] for a summary of developments in this period

[4] Note that Nabokov also used the form of his epic commentary on Pushkin's *Eugene Onegin*, which has been noted as a prototype for *Pale Fire*. [21, 29]

breakthrough from these other texts. At the same time, it is important to ask, if *Pale Fire* represents such a landmark moment, why is it only sporadically referenced in the technical history of hypertext, particularly regarding the development of Ted Nelson's hypertext theory.

3. *Pale Fire* as a potential catalyst for hypertext development

Pale Fire can be seen as a ground-breaking form of print-based hypertext because of its natural feel, as pre-eminent Nabokov scholar Brian Boyd notes,[5] [6] especially compared to other contemporary hypertext novels, which are often cumbersome regarding their artifice, particularly when instructing their readers to read the novel in a set way, ironically re-introducing linearity into the novel. With *Pale Fire*, one is naturally curious to follow the links without prior instruction, and moreover, good readers will want to subvert the paths presented to them in order to explore the fictionality of the novel even further and expose Kinbote as a fraud or suggest that he is the mastermind behind the entire novel. One reason for the natural feel of the hypertext is Nabokov's agenda concerning the novel. He once suggested that 'one of the functions of all my novels is to prove that the novel in general does not exist'. [14] One could argue with *Pale Fire*, he creates a hypertext that does not exist in the reader's mind while reading the novel, even though they naturally follow the links and make connections of their own, possibly the most important part of hypertext's agenda. Furthermore, a key theme of Nabokov's fiction is the constant game between reader and author, rather than the predominant conflict in other fiction between protagonist and antagonist, often posed in a chess problem metaphor. [7] Nabokov's reader has to be active in their thinking. This language is similar to discourse on performance in hypertext, albeit in a more competitive way, highlighted in recent papers on the Web. [15] Nabokov's ideal reader sees the resonances in his patterns and found the connections he had lovingly planted in his intricate works. He further introduced false leads and counterpoints to fit into a Hegelian model of thesis, antithesis, and synthesis that underlies a fair proportion of his fiction. [23] He believed that by enticing and tricking readers with these connections he could engage in a game with the discerning reader whereby the reader would eventually reach a conclusion as to the deeper resonances in the text.

Pale Fire's prophetic similarities to hypertext run deeper than Nabokov's ideology throughout his fiction. Kinbote's parodical and biased self-indexing, in all its egocentric and delusional glory, [4] is a problem resembling Search Engine Optimization and inserting unnecessary keywords into an index, one of the oldest recognized forms of hypertext. Claire Minton in *Cat's Cradle*, best analyzes the trope of self-indexing by suggesting that the amateur who indexes their own work reveals a lot about their personality and faults. [32] Certainly Kinbote's index reveals his predilection for boys through a game of word-golf (lass to male) [7], his bias against Shade's wife by not mentioning any references to her in the index, and the emphasis on Zembla throughout the commentary. The most important hypertextual trope in Nabokov's novel, however, is an explicit network of

references, both internally and externally to numerous sources.[6] There is a sense of autonomy within this referencing, very similar to the World Wide Web, whereby it appears to contain all the answers even though it requires the external sources to inform it.
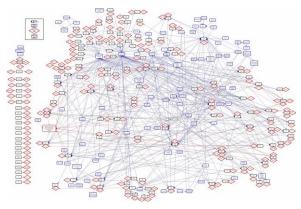

Figure 1: A hypertextual map of Vladimir Nabokov's *Pale Fire*

3.1 Intertextual networks

Pale Fire has 504 explicit connections (mapped out in figure 1), with 37% notes referring to the poem, 63% notes referencing other notes and 69% of all references coming from the index, purely referring to the notes. It must be noted that the references to the poem are predominantly weak ties, intended to maintain the pretense of commentary, while the references to the commentary strengthen the linearity of Kinbote's narrative(s) by skipping any factual glosses that distrupt the narrative's flow. Some of the most highly connected hubs are the notes referring to Kinbote's Zembla delusions and Zemblan geography. These hubs demonstrate Kinbote's unreliability within the novel empirically because they predominantly focus on his misreading of the poem and focus on his own story, rather than glossing some of the most critical information about the poem, such as the source of the poem's title from Shakespeare's *Timon of Athens,* even though it is the only book he has with him in his cave! Nabokov has structured the novel to perennially return to these points because it enables the reader to realize that Kinbote is manipulating the poem to his own reading of the text. One cannot help but realize that Kinbote's focus is on himself rather than annotating Shade's poem when one is repeatedly confronted with references to Zembla**.** It also worth comparing the network of *Pale Fire* to Broder *et al*'s bow-tie model of the World Wide Web [26] as four separate continents: there is a clear island of in-links in the index, because the index is never mentioned in the main text. The poem contains a section of links that are never reciprocated and thus form the island of out-links, since it would be odd if a poem referred to its own commentary. The commentary itself is a hotbed of self-reference and forms the strongly connected core. Finally, there are a few entries in the index, which Kinbote refuses to connect to

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anywhere else, that make up the tendrils. Thus, one can see a small version of this network within Nabokov's novel.

It is the network's connections to external references that often supplement the internal allusions and also pose their own problems to be solved by the reader. These external references appear in either subtle or explicit references, occasionally transcluded into the work through quotations. An interesting feature of the internal network in the text is that most of the external references are also 'solved' or referred to internally. A popular example of this phenomena is the plethora of references to T.S. Eliot, who Nabokov was renowned for disliking, [7] in both the poem and the commentary. In his poem, Shade refers to 'some phony modern poem' [22], and on the same page as his comments to this allusion (never fully explained within the note), Kinbote notes that 'Toilets' is an anagram of 'T. S. Eliot' [22]. Here, Nabokov is giving the reader the answer without having to refer to any outside sources as long as the reader makes the connections Kinbote does not attempt. Thus, in the words of Brian Boyd, one does not need a 'Borgesian library' [7] or the World Wide Web to understand the allusions, because *Pale Fire* forms its own. This paradoxical form of autonomy is also a feature of the World Wide Web itself, whereby one can find most knowledge internally, but that information would not be available without the external sources to provide the information. Even though other novels are so densely allusive with great purpose – Nabokov's later work *Ada*, James Joyce's *Ulysses* and *Finnegans Wake*, and Thomas Pynchon's *oeuvre* are three examples from the Twentieth Century alone – what separates *Pale Fire* from other similar novels is both the natural prompting to explore this network offered by Nabokov and the sense of autonomy that is perceived by readers finding the 'solution' to many of the problems they pose themselves within the same work. Hence, one can see the significance of *Pale Fire* as an early demonstration of hypertext.

3.2 Ways of traversing the network

Nabokov's approach to guiding the reader is therefore vital to the whole enterprise of the novel, if it is to be a successfully autonomous hypertext, and thus he alludes to three different types of reading, all of which have parallels in hypertext theory. The first type is linear reading that Nelson notes is also hypertext, [24] but this is not of particular interest to either the reader of the novel, since it does not reveal much of the hidden layers of the novel, or the hypertext theorist, for it represents the usual mode of reading which the hypertext manifesto tries to distance itself from. A linear reading of *Pale Fire* also allows Kinbote to become the dominant voice within the novel because it foregrounds the linear narrative of the commentary, rather than how the commentary serves the poem. Unless a reader is wholly sympathetic towards Kinbote, they are likely to start exploring the text in a non-linear manner: highly encouraging for any hypertext scholar.

A multi-linear, hypertextual approach to the text is alluded to far more frequently and appears mainly through hyperlinks, with the occasional transclusion of quotations from the poem, Shade's other works and the literary canon. A more unconventional form of hypertext, which can only work in print or its representation, appears in the novel through the use of the physical nature of the novel. Kinbote in his foreword refers to his last note [22], subverting causality immediately, since following the links will lead the reader to the conclusion of the novel and one of the main

mysteries of the foreword, the identity of Shade's murderer. This type of hypertext is expanded by the discourse of Hayles regarding Random Access Devices, [16] whereby readers can open up a book at any page and potentially find something useful or interesting, a trait that electronic systems cannot exploit so naturally.

A more sophisticated version of random access is searching the novel for specific phrases or motifs, something which Nabokov encourages the reader to do, making Kinbote repeatedly allude to 'a note you will find later on' [22]. Often these notes are of little interest to the reader and further Kinbote's agenda rather than revealing any 'truth' within the text. The reader may be prompted, however, to search through the text more generally and make their own Bushian trails [8] through the novel to demonstrate Kinbote's unreliability, the significance of intertextuality, their own opinion on the authorship or various other facets of the novel. This is reminiscent of literary criticism of *Pale Fire* and perhaps the critical industry altogether. In fact, one might see *Pale Fire* as a microcosm of literary fiction and criticism, with the internal links to motifs, external references to other novels, and literary criticism to make hitherto unseen connections. I believe making one's own connections is the most important form of reading *Pale Fire*, because it subverts any linearity in the text asserted on the reader by authority within the text, be it by Vladimir Nabokov, John Shade, *or* Charles Kinbote, thus demonstrating the complexity of the hypertextuality within *Pale Fire*.

4. CONCLUSION

Perhaps if Ted Nelson had demonstrated *Pale Fire* as a hypertext, it would have taken a more important place within technical hypertext history. Even so, it is still an exceptionally strong platform for hypertext that it should be studied more extensively. *Pale Fire*'s potential as a hypertext centers around the natural feel of the novel and the sheer density of the connections in the text. Due to the volume and intelligence of the links, the text appears autonomous, and as though it counts all the answers, while not actually answering very much due to the indeterminacy of the text. The novel becomes even more interesting once one considers the reading methods Nabokov encourages through the text. He alludes to a linear reading but does not expect people to follow it. He also suggests that one follow connections prepared for them by an unreliable narrator, again not a good way to read the novel. The two most interesting suggestions are to use the shape of the novel to make connections and to search through the novel and make one's own trail, thus finding evidence to satisfy the reader's own conclusions. There is also evidence to suggest that the intertextuality within *Pale Fire* is significant enough to surmount to a medium size complex network that replicates the larger picture of literature as a network employed in the imagery of post-structuralists and reader-response theorists.

5. ACKNOWLEDGEMENTS

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