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DIPLOMOVÁ PRÁCE

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Forking the Path: A Study of Hypertext

Rozvětvené cestičky: Studie hypertextu

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Vedoucí práce: Louis Armand, Ph.D.

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I declare that the following MA thesis is my own work for which I used only the sources and literature mentioned, and that this thesis has not been used in the course of other university studies or in order to acquire the same or another type of diploma.

V Praze dne 04.01.2023

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Abstrakt

Cílem této diplomové práce je kriticky uchopit koncept hypertextu a formulovat různé přístupy k němu. Hypertext bude nejprve interpretován z teoretického hlediska společně s filozofií logocentrismu jako proces nesekvenčního psaní, který je charakteristický nejen pro elektronickou literaturu, ale i pro psaní obecně. Dále se k hypertextu bude přistupovat jako k systému, který umožnuje tvořit, číst, vnímat, ukládat a využívat informace specifickým způsobem. Tento systém zviditelňuje vzorce nesekvenčností, které neodmyslitelně ke psaní patří. Třetí přístup bude chápat hypertext jako techniku, jejíž implementace bude analyzována společně s koncepty performativity umění a jazyka.

Klíčová slova: hypertext, hypermediální studia, digitální média, logocentrismus, avant-garde, performativita

Abstract

The aim of the present thesis is to critically engage with the concept of hypertext and to outline various approaches to it. Hypertext will first be interpreted theoretically and will engage with the philosophical notions of logocentrism. It will be viewed as a process of non-sequential writing that is characteristic not only for electronic literatures but for writing in general. Second, hypertext will be approached as a system that allows one to create, read, perceive, store, and utilize information in a particular way. This system makes the patterns of non-sequentiality inherent in writing visible. Third, hypertext will be viewed as a technique, the implementation of which will be analyzed in relation to the concepts of the performativity of art and language.

Key Words: hypertext, hypermedia studies, digital media, logocentrism, avant-garde, performativity

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0. Introduction – unsketching boundaries

0.0. Intro.(duction)

The primary aim of the present project is to reposition the concept of hypertext within contemporary literary and theoretical discourses. The need for that comes simultaneously from two directions. On the one hand, the thesis wants to contest the traditionalist definitions of hypertext that have been prevalent in the writing on hypertext by authors such as George P. Landow, Jay David Bolton, and others. The issue with the writings of those authors is that they attempt to portray hypertext as a phenomenon unique to the electronic environment and to separate it from the 'printed' book. The present thesis attempts to prove that such a binary approach is unjustified and that it limits the understanding of hypertext per se. Most importantly, however, it reduces its flexibility both as a theoretical tool and a 'form' of technology, and therefore, creates a potential for it to become 'outdated'. The goal then is to work against the idea of the outdatedness of hypertext and illustrate its progressively growing relevance.

The second motivating factor is the correlation between the development of hypertext alongside technology and the 'evolution' of language that has occurred as a result of that. As has already been defined both by Theodor Nelson and (indirectly) by Jacques Derrida, though in different contexts, any writing (and not only writing but the language itself) is, in fact, hypertextual in quality. The ideas of those two theoreticians will form a theoretical foundation for this thesis – in particular, Nelson's definition of hypertext as non-sequential writing and the hypertext's close connection to literature, and Derrida's deconstructive method and the proposition of the inherent referentiality of language. The conception of language, as has been stated by Louis Armand has already undergone a transformation, turning from "organic" to "machinistic or rather technological."¹ An additional 'level' is added to it when technology (in particular, digital technologies) grows to fully dominate evevn the simplest operations of everyday. This is when hypertext needs to be readdressed and reanalyzed – and this is where the theory is bound to meet the practice in the most obvious ways.

Thus, the present thesis will attempt to show that the functioning of hypertext currently resembles this of an autopoietic eco-system, in which elements are co-dependent –

¹ Armand, Louis. *Techne*, UNIVERZITA KARLOVA V PRAZE NAKLADATELSTVÍ KAROLINUM. 2003, 24.

the modes of not only creating texts but also organizing the information and the systems of its storage have affected the way the language operates (and vice versa) – and hypertext (both as a technology and as a philosophical concept) lies at the basis of it. The more technology develops, the more it transforms 'the text', and the technological quality of text becomes particularly apparent. 'Technological' here means a certain presence of mechanistic and automated elements, but at the same time, a development of new forms of aesthetics and poetics. This is why it is important to assess various instances of more or less contemporary hypertexts, in order to identify the potential trends and transformations in language and new ways of significations within it.

This will be done in several steps. The first step performed, consequently, in the first chapter of this thesis will establish the 'origins' of hypertext and provide basic definitions thereof, starting from Vannevar Bush's *Memex* and Ted Nelson's *Literary Machines*. Those will be considered primarily as the 'utilitarian'/practical implementations of hypertext, that would tangentially lead to its most recent omnipresent reiteration – Wikipedia. Having established what hypertext was 'dreamt up' to be, the next step would be to attempt to place it in the context of the relevant ideological frameworks that could have been helpful when thinking of hypertext – namely, capitalism (primarily, through Nick Land's writings) and posthumanism (primarily based on Donna Haraway's "A Cyborg Manifesto"). The ideas that will be brought forth here (i.e., in the second chapter) will prepare the ground for the analysis of the hypertexts and 'instances of language' as such.

For the purpose of illustrating the flexibility and omnipresence of hypertext, works of various mediums will be analyzed. Chapters three to five will thus be concerned with a range of hypertextual works. The examination will start with an example of a more 'traditional' electronic hypertext – Shelley Jackson's *Patchwork Girl* and proceed with examples of the works from the Net.Art digital archives, primarily MEZ's *Mezangelle* project. The fourth chapter will continue the exploration of hypertext on the examples created for print – Mark Danielewski's *House of Leaves* and Doug Dorst and J.J. Abrahams' *S*, with a focus on the concept of negative space and paperspace. The ideological background for this is, of course, James Joyce's *Finnegans Wake*. The fifth (and final) chapter will draft links between the hypertext and abstract expressionist art, questioning the possibility of hypertext being avantgarde – and simultaneously putting under question the notion of avant-garde itself. One final example of hypertext as a work of remediation will be provided – Tom Phillip's *A Humument*.

What the present thesis attempts to discover is the notions of poetics that are facilitated by digital technology and brought to motion by hypertext. These can concern various ways of alienating the language for aesthetic or political purposes (e.g., a made-up language based on computer programming or AI-generated poetry), the purposeful creation and revelation of 'negative spaces' within texts, or the remediation of art-literature. All of these processes involve various – and often relatively novel – ways of significations (that at times involve more abstract and arbitrary signs) and interactions between the producers and receivers of hypertexts.

0.1. Preliminary observations

The earliest theoretical works written on hypertext at the end of the previous century (e.g., Jay David Bolter's *Writing Space: The Computer, Hypertext, and the History of Writing* (1990) and George Landow's *Hypertext: The Convergence of Contemporary Critical Theory and Technology* (1992)) reveal several notions that dominated thought on the subject of hypertext and played a crucial role in the formation of theoretical approaches to hypermedia and hypertextuality. Most prevalent were concerns for, as well as 'predictions' of, the future – the future of the book as a medium, of technology, and of hypertext itself. Hypertext was viewed as a work-in-progress, a 'homunculus' that was developing on the verge of 'tradition' and 'innovation' and appeared to be a rather unstable and unpredictable 'creature'. Some hailed it as the harbinger of a revolution and the destroyer of the 'old' order, while some considered it to be a part of the 'natural' progression of things towards ultimate industrialization and technocracy. Yet others believed that it is a temporary notion that will become obsolete, while the monumentality of the tradition of the printed book would prevail.

Writings about hypertext have often used literature as a practical illustration of the theory. This convergence of the 'two worlds' – the world of technology (of cybernetics and computing/programming) and the world of literature is, one could claim, what made hypertext a topic of increased interest for study and research. On the one hand, it operated on the 'applied' level, serving as an electronic tool and as a system for storing and sharing information. On the other hand, it presented itself as a potential space for the creation of (experimental) literature with a particular set of aesthetics and performative power – a 'self-ignorant' outcome of the deconstructionist and post-structuralist philosophical notions. George P. Landow in his opening of *Hypertext 3.0* (an updated version of his work back from 1992), outlines this 'feature' as the key to understanding hypertext:

When designers of computer software examine the pages of *Glas* or *Of Grammatology*, they encounter a digitalized, hypertext Derrida; and when literary theorists examine *Literary Machines*, they encounter a deconstructionist or poststructuralist Nelson. These shocks of recognition can occur because, over the past several decades, literary theory and computer hypertext, apparently unconnected areas of inquiry, have increasingly converged. ... Working often, but not always, in ignorance of each other, writers in these areas offer evidence that provides us with a way into the contemporary episteme in the midst of major changes.²

However, what becomes a revelation for Landow is not a surprise at all if one does not separate printed and electronic texts but rather chooses to approach the concept of *text* in general and treat it as an apriori hypertextual object (this thesis invites its readers to do precisely that). Such a view allows for the consideration of hypertext as an 'event' in a Derridean sense – as a notion that creates a rupture within an established discourse.

Considering this, what does hypertext represent – or to be more precise, how can the study of hypertext be useful and significant? Two points should be outlined here. The first is the hybrid quality of hypertext mentioned earlier. The fact that hypertext is a 'product' of the combination of various mediums makes its categorization a difficult task despite the repeated (almost compulsive) attempts of hypertext theoreticians to do so. It has often been stated that hypertext allows the mechanisms that are present (though generally invisible) in the text to become observable. More fundamentally, such hybridity may open up space to question the degree to which the mundane categories we utilize when approaching texts are artificial constructs (often of binary structure – e.g., virtuality/materiality, digital/print). In theory, nothing prevents a reader from tearing up a printed book and reading it non-sequentially – or not reading it at all – and simply performing the act of destructive dissociation. As Darren Tofts rightly points out,

Textuality, the contingent web of contextual meaning that a reader creates in collaboration with the written words on the page, is not confined to a linear progression, simply because the technology of the book is structured along an axis from left to right. Textuality always has the potential to burst beyond the boundaries imposed by the technology, more so in certain types of experimental writing.³

And yet, this is not how the printed text is approached; it 'requires' a 'sequential' reading. Sequentiality, however, is yet another categorical quality that has been 'assigned' to the printed text. This present thesis will attempt to free itself from such clear-cut

² Landow, George P. *Hypertext 3.0: Critical Theory and New Media in an Era of Globalization.* 3rd ed. Baltimore: The Johns Hopkins University Press, 2006, 1.

³ Tofts Darren, & McKeich, Murray. *Memory Trade: A Prehistory of Cyberculture*. G and B Arts International, 2011, 43.

categorization and will consider both printed and digital reiterations of hypertext under the common umbrella of hypertext theory – a theory of textual genetics and writing itself.

The second point connected to this, which the present thesis needs to address, is the revision of the position from which hypertext must be approached. If for George P. Landow, Jay Bolter, and others, writing about hypertext was largely speculation as to where its development might lead, this thesis cannot position itself similarly. It cannot theorize about hypertext as a concept that is in the early stages of its development. Rather its aim should be to establish the realization that the 'writing space' – to borrow Bolter's formulation – of this thesis, as well as of the majority of the texts that are now being read and written, belong to a 'world' that is largely 'hypertextual'. One could tangentially liken the influence hypertext had on the concept of the text to the effect of abstraction in art, which drew attention away from painting as a stable object to painting as a work-in-process that involves certain mechanisms and requires certain tools.

Neither can hypertext be considered as a stand-alone technological 'trend' that is 'ahistorical'. As Darren Tofts states in his work on the history (or pre-history) of cyberculture, *Memory Trade: a Pre-history of Cyberculture*,

We are always in between the old and the new, between the historical and the possible ... the poetic forms we already have already contain the possibilities for the slow revolution that will beset us in future cybercultures.⁴

Tofts points out the difficultly of speaking about a cyberculture (especially back in 1998 when the book was first published) due to it being a developing phenomenon. The fact that cyberculture still is in the process of 'becoming', makes it impossible to fully 'historicize' it – or even definitively speak of its pre-historicity. At the same time, this opens up the possibility for the 'invention', and the revelation of "surprising insights into unseen, concealed dimensions of possibility"⁵ of both the past and the present. The leitmotif for such exploration is the examination of the history of "technologizing of the wor(1)d"⁶, of which hypertext is a stage. Thus, it is important to place hypertext in the flexible and fluid context along the timeline of the development of technology, of the *memory* of technology, and the innovations in art that often go hand-in-hand. As Tofts writes,

The threads that are being woven into the social text of cyberculture as we are coming to understand it have a long prehistory. This complex ancestry involves the history of writing, the development of the

⁴ Tofts, 10.

⁵ Tofts, 15.

⁶ Tofts, 15.

abstract mental geography of cspace, and powerful mnemonic technologies that externalize and mechanize much of the work normally done within the mind. It is a common mistake within cyberphilia to discount anything that precedes that age of cybernetics and computer networks (especially books) as being part of cyberculture. There is a real danger in asserting that cyberculture is associated with the end of the book, or that harking back to literary modernism is a kind of special pleading to salvage writing in a post-literate datasphere of flows and decentred networks.⁷

The position of this thesis in relation to Bolter, Landow, et al. can then be taken as a 'reply' from the future – from the future where hypertext has 'succeeded'. This notion of 'success' has its own problematics, which will be explored in more detail in the chapters that follow. Hypertext did not bring the 'revolution' that was envisioned – it did not destroy the 'authority' of the author or turn the reader into the ultimate decision-maker; neither did it lead to the creation of a radically new form of literature. It did, however, revealed ambiguities that were present in the mildly utopian idea of 'global storage' that would come to pervade electronic space. Additionally, it destabilized the concept of text as an 'end product' and encouraged the perception of it as a process of creation and cooperation, in which both the author and the reader participate (be it consciously or unconsciously).

Such a view is deconstructionist at its core. Hypertext, being a complex concept, needs to be approached from various angles, showing, how, even within its own utilizations, it trespasses and breaks away from the binaries that theorists like Bolter and Landow tend to bring to a head – those of materiality and virtuality, the computer screen and the book, the 'artificiality' of technology and 'naturalness' of 'human' experience. The multiplicity that is revealed in relation to hypertext, however, is not exclusive to it – in fact, nearly any 'solid' philosophical concept, if placed under scrutiny, witnesses the shattering of its solidity, which then allows for multiplicity to emerge.

0.2. Theoretical Intermission

POZZO: Stop! (Lucky stops.) Back! (Lucky moves back.) Stop! (Lucky stops.) Turn! (Lucky turns towards auditorium.) Think!

LUCKY: ... the facts are there but time will tell I resume alas alas on on in short in fine on on abode of stones who can doubt it I resume but not so fast I resume the skull fading fading fading and concurrently simultaneously what is more for reasons unknown in spite of the tennis... I resume alas alas abandoned unfinished ... the skull alas the stones Cunard (mêlée, final vociferations) tennis... the stones... so calm... Cunard... unfinished...⁸

⁷ Tofts 133.

⁸ Beckett, Samuel. Waiting for Godot: A Tragicomedy in Two Acts. 1st ed. New York: Grove Press, 2011 63-65.

*Cybernetics is an extreme demonstration of the ability of writing to function in the absence of a speaking or writing subject.*⁹

But writing itself already in an 'ambivalent' conception, since it is both a practice and a material form and a system of signs, not just a medium.¹⁰

What is one to do when given the task – 'to think'? Some of the questions arising here would, of course, concern the subject of thinking (to think about what?) and the timing of thinking (to think when? i.e., when does one begin and end to think?). In *Waiting for Godot*, Lucky functions as a machine that sings and dances upon demand/request. Thinking comes along as one of his 'talents'. Within the play, his monologue evidences this skill, answering the question of timing at once. Like a machine, Lucky can be switched on and off (by means of a hat being put on and off his head) until he 'malfunctions'. As for the subject of his thinking – it is confused; Lucky thinks about everything and, eventually, about nothing. His thinking is scattered – its pieces and repeating motifs are left "abandoned unfinished" without forming a solid picture; they are indeed "fading ... concurrently simultaneously". Pozzo claims that Lucky "used to think very prettily once," so that he "could listen to him for hours." What this seems to imply is that Lucky's 'thinking' was once coherent.

The rather chaotic, non-sequential, disorganized quality of thinking does not necessarily come as a surprise. One can consider it an almost a given fact. This ambivalence is revealed when one is faced with the problem of the representation of thought. This is where Pozzo's command 'to think' leads to a range of other questions. Lucky, in fact, is ordered to perform thinking – to find a form of expression for something not immediately intelligible – something rather fluid and non-systematized. Both writing and speech can be seen as the outcome of this process – an attempt to give an audio-visual shape to thought. If at some point, Lucky was able to perform thinking in the form of coherent oral storytelling, his thoughts ultimately fall apart in his present circumstances. During his encounter with Vladimir and Estragon, for instance, his thinking turns out to be nonsensical. Yet, what is nonsensical about it? Apart from its incoherence, Lucky's thinking is unsettling because it is mechanical – it is a recurring pastiche of various names and landmarks as well as things seen, heard, and read. This representation contradicts the view that thought is a spontaneous,

⁹ Tofts, 61.

¹⁰ Donald E. Theall. *Beyond the Word : Reconstructing Sense in the Joyce Era of Technology, Culture, and Communication*. University of Toronto Press, 2018, 98. EBSCOhost, https://search-ebscohost-com.ezproxy.is.cuni.cz/login.aspx?direct=true&AuthType=ip,shib&db=e000xww&AN=2027681&lang=cs&sit e=ehost-live&scope=site.

original, and independent act – instead, it turns out to be data sets extracted randomly with no thoughtful intent behind it. In this light, thought's relation to its two major forms of expression – speech and writing – is problematized. In the example of Lucky, speech becomes absurd.

Approaching hypertext, it might be helpful to consider this problematic relationship between speech, thought, and writing as a starting point. Even though the present thesis will approach hypertext primarily as a form of writing, it is important, in this initial stage, to place writing in a conversation with thought and speech – which, in turn, will lead back to hypertext as an abstract concept that can be seen to represent an amalgamation of all three.

In *Of Grammatology*, Jacques Derrida speaks about the "mutation in the history of writing" – of the mutation of history as writing. What is outlined here is an image of the world, which, from presumably being dominated by speech (spoken word) shifts towards the domination of writing. This does not necessarily mean domination over the act of writing – rather, of an idea of writing – of writing as a technology that permeates processes that, at first sight, do not necessarily have to accept writing as their dominant modus operandi. As Derrida points out:

... we say "writing" for all that gives rise to an inscription in general, whether it is literal or not and even if what it distributes in space is alien to the order of the voice: cinematography, choreography, of course, but also pictorial, musical, sculptural "writing." One might also speak of athletic writing, ... of military or political writing in view of the techniques that govern those domains today. All this to describe not only the system of notation secondarily connected with these activities but the essence and the content of these activities themselves. It is also in this sense that the contemporary biologist speaks of writing and pro-gram in relation to the most elementary processes of information within the living cell. And, finally, whether it has essential limits or not, the entire field covered by the cybernetic program will be the field of writing. ¹¹

What this signifies is that if earlier, <u>writing</u> was believed to be a "signifier of the signifier" (i.e., the final element in the thought-speech-writing chain), the 'mutation' has, to a degree, removed speech from the progression, thus establishing a direct connection between thought and writing – i.e., assigning thought an orthographical quality.

Throughout history, writing has been used as a double-metaphor to signify something originary and natural – the original 'law', the transcendental truth that precedes thought itself and of which a spoken word is an expression, and the ultimately 'unnatural', artificial act of physical writing, which is a 'distortion' of logos. The metaphor works if the world order is viewed as pre-determined, i.e., pre-written: "Arche-speech is writing because it is a law. A

¹¹ Derrida, Jacques. Of Grammatology. 3rd ed. Baltimore: The Johns Hopkins University Press, 1997, 9.

natural law. The beginning word is understood, in the intimacy of self-presence, as the voice of the other and as commandment." Writing thus acquires two levels: writing as truth – a "divine inscription in the heart and the soul," and writing as an artifice – a technique "exiled in the exteriority of the body". What such a metaphor establishes is the vision of closure – on the one hand, what can be expressed through speech is the pre-written truth, the 'divine writing' (this view implies the existence of such a truth); at the same time, what can be written (physically written) is a shadow of speech – it is derived from speech and cannot go beyond it.

This metaphor of writing mimics the problematic relationship between a signifier and a signified. On the one hand, once the concept of a single 'truth' (of the pre-written truth) has been shattered, the idea of the transcendental signified does, to a degree, lose its meaning. The relationship between the signifier and the signified turns out to be arbitrary. And yet (as Derrida points out as well), this arbitrariness is only possible within the system, wherein the idea of a transcendental signified is still operational – even if the operation is to refute it. The structure is not broken but transformed from within. As Derrida writes:

The movements of deconstruction do not destroy structures from the outside. They are not possible and effective, nor can they take accurate aim, except by inhabiting those structures. Inhabiting them in a certain way, because one always inhabits, and all the more when one does not suspect it. Operating necessarily from the inside, borrowing all the strategic and economic resources of subversion from the old structure, borrowing them structurally, that is to say without being able to isolate their elements and atoms, the enterprise of deconstruction always in a certain way falls prey to its own work. ¹²

Thus, the project is not to abandon the system but instead to perform a revelatory work within its boundaries. One does not coin a new form of writing – rather, one reveals and 'deconstructs' the 'type' of writing that already existed within the system guided by logocentric significations and the idea of the transcendental signified. Such work of deconstruction is made possible by the system itself and is a by-product of the course of its development.

"The perversion of artifice engenders monsters."¹³ Eventually, Derrida goes on to conclude that the relation between any signifier and signified is arbitrary, thus, if the relationship between a spoken and a written word is arbitrary, the relationship between the concept (as signified) and the spoken word that expresses it (signifier) is arbitrary as well. Moreover, the sign is not a unified entity – it is a composite of various signifiers and

¹² Derrida, 24.

¹³ Derrida, 38.

signifieds, and of other signs. Sign is referential and is involved in the 'play' of other signs. The play of signs implies constant interpretation thereof – the act of reading that is simultaneously an act of writing. Reading and writing, brought together in such way, make these 'classical' binaries converge. The interpretation of hypertext offered by the present work echoes this motif, therefore, allowing the hypertext to be viewed as an *event* that created a breach in the solidity of the theoretical thought in the 'nature' of text.

1. Hypertext and Practicality

*The original hypertext, if there is one, is the dictionary, in which words are defined by other words in a series of potentially endless cyclical loops.*¹⁴

Within the (more or less) contemporary thinking on the topic of hypertext two prevailing views can be identified. One can look at the particular examples of electronic and printed hypertexts and evaluate them as 'benchmarks' for assessing the overall concept of hypertext based on whatever various criteria (aesthetic, linguistic, thematic, etc.) a theorist might fancy imposing on those works. Another option is to view hypertext as an *environment* for the creation of works of a particular type. Such a perspective allows for the introduction of a margin of flexibility to the idea of hypertext and, to a degree, dissociates it from a specific timeframe or format. Instead of acting as an umbrella term for a body of works of a specific kind, hypertext can thus be viewed as an 'eco-system' that aims to provide space in which certain types of works – and certain types of connections between text/art/works – can be created.

One of the 'historical' questions associated with hypertext is whether, as a concept and a practice, it has been a 'failure' or a 'success' – and the answer will vary based on how one tends to approach it. This chapter will attempt to distance itself from such 'binary 'judgements' and rather seek to establish the hypertextual *presence* by exploring the systems' that make the creation of hypertexts possible. This exploration will start with a focus on the ideas that laid the foundation of hypertext theory, starting from Ted Nelson's *Project Xanadu* and Vannevar Bush's *Memex*.

The 'problem' that motivated the need for the creation of an environment alternative to that of printed media had already been identified in 1945 by Vannevar Bush, who, in his essay "As We May Think", writes:

The difficulty seems to be, not so much that we publish unduly in view of the extent and variety of present day interests, but rather that publication has been extended far beyond our present ability to make real use of the record. The summation of human experience is being expanded at a prodigious rate, and the means we use for threading through the consequent maze to the momentarily important item is the same as was used in the days of square-rigged ships.¹⁵

The issue thus was that of the increasing growth of <u>information</u> production and circulation, and the need for a new method of organization thereof. The push, not

¹⁴ Ranulph Glanville as cited in Perovic, Sanja. "The Intelligible as a New World? Wikipedia versus the Eighteenth-Century "Encyclopédie"". *Paragraph* 1.34 (2011), 14.

¹⁵ Bush Vannevar. "As We May Think". *The Atlantic* (July 1945), 1. Accessed on 18 Dec. 2022. https://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/.

unexpectedly, was towards mechanization. This led Bush to suggest a system that he chose to call 'memex', a quintessence of human memory and machine. A few things need to be noted about Bush's idea. First, Bush intended memex to serve primarily as a 'personal assistant', and an 'add-on' to an individual's memory – i.e., the possibility of it becoming a global database had not yet been articulated in his writings. Second, memex was intended to be purely mechanical – i.e., its function was 'utilitarian' – a storage/archive rather than a space for creativity. Bush writes:

Consider a future device for individual use, which is a sort of mechanized private file and library. It needs a name, and to coin one at random, "memex" will do. A memex is a device in which an individual stores all his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility. It is an enlarged intimate supplement to his memory.¹⁶

The difference between memory and memex, as Bush states, is that the system allows

the user to create links between various sources - these links are manual and arbitrary

(subject to the user's need/preference),

When the user is building a trail, he names it, inserts the name in his code book, and taps it out on his keyboard. ... The user taps a single key, and the items are permanently joined. In each code space appears the code word.¹⁷

Later, if the user would need to recall the linking, they would be able to find it in the

'database'; for where memory fails, memex survives. Here, the possibility of sharing and

interconnection between individual memex emerges:

And his trails do not fade. Several years later, his [the user's] talk with a friend turns to the queer ways in which a people resist innovations, even of vital interest. He has an example ... In fact he has a trail on it. A touch brings up the code book. Tapping a few keys projects the head of the trail. A lever runs through it at will, stopping at interesting items, going off on side excursions. It is an interesting trail, pertinent to the discussion. So he sets a reproducer in action, photographs the whole trail out, and passes it to his friend for insertion in his own memex, there to be linked into the more general trail.¹⁸

Here, however, the possibility of creativity and innovation seemingly ends. While

providing an environment for linking independent sources, Bush's memex seems to leave

little space for creative thought, focusing more on mechanics, efficiency, and organization:

For mature thought there is no mechanical substitute. But creative thought and essentially repetitive thought are very different things. For the latter there are, and may be, powerful mechanical aids.¹⁹

¹⁶ Bush, 6.

¹⁷ Bush, 7.

¹⁸ Bush, 7.

¹⁹ Bush, 3.

This view, however, can be contested. As Kenneth Goldsmith mentions in Uncreative Writing, "the suppression of self-expression is impossible"²⁰, i.e., even seemingly 'mechanical' work has a creative element in it, for it often requires organizational choices to be made. Thus, both retyping a newspaper (Goldsmith's Day project) or deciding on the sequence in which individual sources would be linked is, in and of itself, writing – if one is to view writing as an act of working with text and information, arranging it in a particular way and creating a space in which certain content can function. Additionally, Bush already mentions the possibility of the users leaving notes and comments on the works they are linking, i.e., working on, and, to a degree, altering the original text; and if those link trails were to be made available to the wider public, the footnotes and notes on the 'page margins' would form a system of writing of their own. This is why Bush's work is often considered alongside Ted Nelson's Xanadu project, with Nelson himself citing Bush in Literary Machines. On the one hand, Nelson was influenced by Bush's idea of hypertext serving a utilitarian purpose and worked on expanding this notion. On the other hand, however, he recognized the wider potential of hypertext, namely, as a theoretical and literary tool. One may claim that this recognition has been crucial in the development of the theory of hypertext. As Louis Armand states in Techne,

[this] utilitarian function of hypertext, an extension of older information retrieval systems, is still the most common use of the medium—and despite its supposedly radical break with the existing structure of the book it remains, in fact, closely related to such traditional "internal" meta-textual functions as citation, indexing, tables of contents, pagenumbering, chapter divisions and subdivisions, footnotes and endnotes, appendices, glossaries, prefaces and postscripts, critical introductions and afterwords, as well as to such "external" functions as concordances, annotations, curricula vitae, reference guides, biographies, scholarly editions, monographs, reader's guides, dictionaries, encyclopaedias and so on. By the same token, hypertext can also be seen as eroding precisely those boundaries which determine the relation of text to meta-text, along with such unitarian notions as completion, closure and linearity.²¹

Moreover, "the first requirement for a theory of hypertext is that it take into account the medium itself as a kind of mechanical-textual apparatus. That is, not in its utilitarian sense, but in its signifying function"²². Considering this, the first interrogation that can be made about Nelson's *Literary Machines* (1987) is the consideration of what it actually *is* - what it represents and signifies as a piece of work. From its first pages, *Literary Machines*

²² Armand, 48.

²⁰ Goldsmith, Kenneth. *Uncreative Writing: Managing Language in the Digital Age*. New York: Columbia University Press, 2011, 17.

²¹ Armand, Louis. *Techne*, UNIVERZITA KARLOVA V PRAZE NAKLADATELSTVÍ KAROLINUM, 2003, 46.

provides definitions of itself – it is introduced as a book "partly *about* hypertext"²³, and at the same time, as "hypertext" itself. It claims to describe a theory and simultaneously functions as a practical illustration of that very theory. It is, at the same time, 'a pitch' for quite an ambitious commercial project (Xanadu), which, as Nelson imagined, would be able to alter the way the information is made available to its receivers. This multi-purpose, 'hybrid' quality of the book, is, in fact, one of the fullest illustrations of how a hypertextual system might function. What followed *Literary Machines* were 'diversions' that borrowed some of its ideas.

Nelson famously defined hypertext as "non-sequential <u>writing</u>"²⁴ – as "text that branches and allows choices to the reader, best read at an interactive screen"²⁵. When introducing the Xanadu project as a "hypertext system"²⁶, he gives a three-fold description of it. For Nelson, Xanadu was bound to become "a form of storage"²⁷, "a new form of literature", and "a network that might just revitalize human life"²⁸. Thus, Nelson, as Louis Armand states in *Literate Technologies*, has extended the meaning and understanding of hypertext to "the whole gamut of interlinked and mutually affective communication "systems" or "technologies,"²⁹ and "developed a model of literacy which encompasses both the micro-scale of sublexical or pre-linguistic elements and the macro-scale or "open totality" of the textual *chaosmos*."³⁰ The point of convergence is the belief that the system of thought is non-sequential and that the environment in which texts are read and written should reflect this.

Nelson's hypertext, as a form of storage, was supposed to operate somewhat similarly to Bush's memex³¹. Chunks of different texts could be connected independently, and the

²⁷ Nelson, 6.

²⁸ Nelson, 6.

³⁰ Armand, ibid.

²³ Nelson, Theodore. *Literary Machines*. 1987, 7. Accessed on 18 Dec. 2022. https://monoskop.org/File:Nelson_Ted_Literary_Machines_c1987_chs_0-1.pdf

²⁴ Nelson, 7.

²⁵ Nelson, 15 (0/2).

²⁶ Nelson, 6.

²⁹ Armand, Louis. *Literate Technologies: Language, Cognition, Technicity*. Prague: Litteraria Pragensia, 2006, 103-104

³¹ As per Nelson's definition: "It [Xanadu] is a system for the rapid delivery of linked documents (which may share material) and the assimilation and storage of changes. System facilities permit promiscuous linkage and

reader had the freedom to navigate between those links as they wished. They could create their own texts or work with the ones already existing in the database, thus having the ability to provide commentary and interpretation on a new level. The published works, according to Nelson, could be easily distributed (subject to subscription), yet their removal would be an elaborate process. Thus, Xanadu, despite the versatility that is often associated with the act of linking, was aiming at permanence. Ideally, it would have had the capacity to store information indefinitely, with all the progress and the history of the creation and the modifications of the works being monitored and archived in the system. The number of possible alterations would have been infinite. The works that are inserted in the system enter the permanent state of being in progress; as Nelson himself mentions, there is no "Final word"³² in Xanadu.

Unlike memex, the creative potential that such a system could have possessed was recognized quite early on. As per *The Economist* article (1986) cited in the introduction to *Literary Machines*:

Conceived originally by Mr Nelson while a student at Harvard as simply a note-keeping program for preserving his every thought, Xanadu has evolved into a total literary process: creating ideas; organizing the thoughts, with traces showing backtracks, alternative versions and jumps to cross-referenced documents; manipulating the text; publishing the results; and logging a share of the royalties to every other author cited.³³

As mentioned earlier, Nelson envisioned that the users of the Xanadu program would not only be able to create their own works but also build hypertexts based on the already existing ones – printed works digitalized and repurposed for Xanadu's format. While the former would officially belong to the authors, the latter would be in the ownership of the system. The end result, however, is that even the individually authored works would still be part of the same system, for the very possibility of their creation would imply the existence of a platform that would serve as a new form of <u>power</u> and have control over the information that has previously been in hands of educational and government-controlled institutions. With Xanadu up and running, those institutions would, in theory, cease to have full control over the data and would have to share that access with an additional source. Nelson himself

³³ Nelson, 3.

windowing among all materials; with special features for alternative versions, historical backtrack and arbitrary collaging. It is based on new technicalities which are of no concern to the user, and materials are stored in locations the user need not know about." (3/4) Note the emphasis on the expectation that the reader would interact only with the front end of the system, not going into its technicalities that would remain invisible.

³² Nelson, 2/61.

emphasized the importance of this split as well as the independence of Xanadu as a platform, which he, perhaps, viewed as the key factor contributing to the 'revitalizing' purpose of his project:

And rather than having to be run by the government, or some other large untrustworthy corporation, it [Xanadu program] can be dispersed under local ownership to serve entire nations and eventually the world.³⁴

The creation of such a platform would lead to the emergence of a new type of writing, which, however, would be created not by destroying and building anew, but by extending the old and the familiar, and erecting a new foundation upon it:

 \dots and this world, this new literature will be built from the "document" as we have long known it, the "author" as we have long known him or her, and an extended form of "writing" as we have long done it and read it \dots ³⁵

While Nelson's literature can be understood as writing in the broad sense of the word, its more 'concrete' manifestations found their way into first-generation electronic hypertexts such as afternoon, a story by Michael Joyce and Patchwork Girl by Shelley Jackson. Some of these works will be considered in more detail later in this thesis. Presently, it might be sufficient to note that many of those hypertexts followed the principles of linking and relatively free navigation between different parts of the text; and while subscribing to the idea of single authorship, they intended to give the reader more space for orientation. They are, however, rather ambiguous in terms of their dynamics, which was important for Nelson's Xanadu – most of the hypertexts that are currently available (even though not necessarily easily accessible) online are completed works that are no longer being edited by their authors. What 'alters' them is the rapid development of technology, which often renders the works in question unreadable - the most common example manifesting as non-functionality of the links and files of particular formats as systems become outdated while no relevant adjustment and update to the work is provided. Nelson's conception of literature, filtered through the prism of Xanadu, is much broader than that. It is almost Derridean in the sense that literature (for Nelson) is a 'document' that is a product both of reading and writing. A collection of such documents forms an autonomous system, where information is freely stored and disseminated. Such a definition presents literature as a complex, hybrid, referential phenomenon. If electronic hypertext fiction narrowed down the literary potential of Xanadu, other sources chose to utilize its concept of hypertext as global storage. Even if Nelson's

³⁴ Nelson, 0/6.

³⁵ Nelson, 1/10.

Xanadu did not materialize as planned, there were projects that achieved what Xanadu aspired to achieve and even took it further (though not necessarily in the direction envisioned by Nelson). The most prominent example of these cases is Wikipedia.

The history of Wikipedia is quite ironic. Its direct predecessor, *Nupedia*, created by Larry Sanger and Jimmy Wales in March 2000, was intended to be an open-source electronic encyclopedia, in which every entry would be carefully reviewed by experts before it could be published.³⁶ As a result of this, the approval process proved to be quite time-consuming, and the number of articles that made it to the 'surface' remained low. This is why upon learning about WikiWikiWeb – a software that allowed the creation and editing of Web pages³⁷ without the necessary knowledge of HTML – Sanger "thought that wiki users would quickly and informally create content for *Nupedia* that his experts would edit and approve. But the *Nupedia* editors viewed the experiment with suspicion; by mid-January [2001] Sanger and Wales had given it a separate name, *Wikipedia*, and its own domain".³⁸ As Roy Rosenzweig states, Wikipedia turned out to be "the tail that swallowed the dog (*Nupedia*)"³⁹, as the number of articles circulating on it was growing and attracting new users.

It would be an oversimplification to claim that Wikipedia achieved what Nelson's Xanadu project was aiming for; the differences are present and cannot be ignored. However, Wikipedia still remains one of the most fascinating iterations of hypertext – both in terms of its functionality as a system of storing, creating, and altering information, and as a tool, which, to a certain extent, did 'revolutionize' the world.

Thus, Wikipedia did create an *environment* built on the principles of interconnected links. It primarily defines itself as an encyclopedia in which every word can be explained through other words, which will be linked one to another. It is also an autonomous system of (non-sequential) writing, for articles are constantly added to Wikipedia, making it grow exponentially (the same article being edited over and over again), 'vertically' (new topics being added to the system), and 'horizontally' (articles dedicated to the same topic being translated into other languages). Wikipedia thus falls under the category of a prototype of a growing infinite organism that is always a work-in-progress with no final word and no

³⁶ Rosenzweig, Roy. "Can History Be Open Source? Wikipedia and the Future of the Past". *The Journal of American History* 1.93 (2006), 119.

³⁷ Rosenzweig, 120.

³⁸ Rosenzweig, 120-121.

³⁹ Rosenzweig, 121.

'concluding' article. Giles Deleuze and Felix Guattari's 'rhizome' indeed seems to be applicable when thinking of such a system:

There are no points or positions in a rhizome, such as those found in a structure, tree, or root. There are only lines.... The point is that a rhizome or multiplicity never allows itself to be overcoded, never has available a supplementary dimension over and above its number of lines, ... All multiplicities are flat, in the sense that they fill or occupy all of their dimensions: we will therefore speak of a *plane of consistency of multiplicities*, even though the dimensions of this "plane" increase with the number of connections that are made on it.⁴⁰

Articles published on Wikipedia are freely accessible for reading to all users regardless of whether they have a Wikipedia account or not. Quite often, Wikipedia articles will be among the first results a user will encounter through a search engine. Editing Wikipedia is also possible, though this process is not as easily accessible and involves different levels of hierarchy (Roy Rosenzweig's mentioning of "an elaborate structure of "administrators", "bureaucrats", "stewards", "developers","⁴¹, and Pamela Graham's chain of "administrators", "active editors", and "editors"⁴²) that define the scope of the editing rights of its users. Additionally, Wikipedia aims at establishing an impression of 'transparency', by revealing how Wikipedia 'actually works'. Its "Talk" section invites contributors to discuss *the potential improvements* that can be made to the currently existing articles, while the "View Source" and "View History" tabs show the 'skeletons' of the articles – the date of creation and the history of the subsequent modifications, as well as the source code and the rules for editing thereof, thus creating the sense of both progression and permanence.

Thus, while appearing to be a relatively 'mundane' example, Wikipedia can be used as a helpful contemporary 'case study' of what a hypertextual storage system and environment might look like if the information could be generated and interlinked in indefinite amounts, and its users had constant, unbroken access to the content. Of course, Wikipedia is intended to be used purely as a source of information – i.e., it does not provide its readers with active space wherein they could make notes or create their personal rooms with links of their own (unless they want to edit Wikipedia). If Bush's and Nelson's ideas have partially materialized, some of them were not/could not be incorporated within global storage. Most importantly, however, Wikipedia grew to be a self-enclosed and self-referential

⁴⁰ Deleuze, Gilles, and Felix Guattari. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis & London: University of Minnesota Press, 2005, 8-9.

⁴¹ Rosenzweig, 124.

⁴² Graham, Pamela. ""AN ENCYCLOPEDIA, NOT AN EXPERIMENT IN DEMOCRACY": WIKIPEDIA BIOGRAPHIES, AUTHORSHIP, AND THE WIKIPEDIA SUBJECT". *Biography* 2.38 (2015), 229.

system – its policy rules are listed in the form of Wikipedia entries. While Wikipedia claims to provide 'objective' writing (though aware of the inherent ambiguity of such a statement), it is not able to avoid cases of 'anarchistic' acts of mimicry and fictionalization, with the credibility of the platform being mocked and attacked by cases of vandalism and sock puppetry. And while Wikipedia attempts to ban those 'parasitic acts', it is unable to prevent them completely (one may consider these acts as outbursts of 'creative writing'). The system is thus 'feeding' on its own content, merging various mediums, and forming a self-sustainable, flexible, and relatively independently functioning environment.⁴³

⁴³ This conception of Wikipedia as an environment somewhat echoes Katherine Hayles' writing on "medial ecology": "The phrase suggests that the relationships between different media are as diverse and complex as those between different organisms coexisting within the same ecotome, including mimicry, deception, cooperation, competition, parasitism, and hyperparasitism". Hayles, Katherine N. *Writing Machines*. 1st ed. Cambridge and London: The MIT Press, 2002, 5.

2. Hypertext as a Mode of Operation

Heat. This is what cities mean to me. You get off the train and walk out of the station and you are hit with the full blast. The heat of air, traffic and people. The heat of food and sex. The heat of tall buildings. The heat that flows out of the subways and tunnels. It's always fifteen degrees hotter in the cities. Heat rises from the sidewalks and falls from the poisoned sky. The buses breathe heat. Heat emanates from crowds of shoppers and office workers, the entire infrastructure is based on heat, desperately uses up heat, breeds more heat.⁴⁴

Capitalism is primarily a digital political economy, much as the medieval economy was primarily analogic.⁴⁵

2.1. Organizing Capitalism (Productivity)

The previous chapter somewhat addressed that one of the 'motivations' for the emergence of hypertext was the fact that the amount of information that was being produced had exceeded the limits of what the printed medium could cope with. A new 'medium' and technique was required in order to match the speed dictated by the capitalistic urge for the production and dissemination of information/content. Hypertext became such a medium. It not only became a solution to the problem of managing excess information but it helped to accelerate the process even further. Information can no longer be separated from the systems of its organizations – the systems of the organization of information of information of information itself.

The world that is currently inhabited by text is an industrial world, one aimed at the production and over-production of information of all formats and across all media. Text forms a substantial part of this ubiquitous term – 'information'. Hypertext and, in particular, electronic variation of hypertext, on the other hand, serves as a system of organization within the machine of information production. What kind of information is being produced within this machine? Jean Baudrillard in *Simulacra and Simulation (*1981) speculates on the topic of the quality and the nature of information as follows:

Either information produces meaning (a negentropic factor) but cannot make up for the brutal loss of signification in every domain. Despite efforts to reinject message and content, meaning is lost and devoured faster than it can be reinjected. In this case, one must appeal to a base productivity to replace failing media. ... Or information has nothing to do with signification. It is something else, an operational model of another order, outside meaning and of the circulation of meaning strictly speaking. ... In this case, there would simply be no significant relation between the inflation of information and the deflation of meaning. ... Or very much on the contrary, there is a rigorous and

⁴⁴ Land, Nick. Fanged Noumena: Collected Writings 1987-2007. 4 ed. Urbanomic/Sequence Press, 2011, 8.

⁴⁵ CAE (Critical Art Ensemble). *DIGITAL RESISTANCE: EXPLORATIONS IN TACTICAL MEDIA*. 1st ed. New York: Autonomedia, 2001, 76.

necessary correlation between the two, to the extent that information is directly destructive of meaning and signification, or that it neutralizes them. The loss of meaning is directly linked to this dissolving, dissuasive action of information, the media, and the mass media.⁴⁶

One may claim that hypertext is a product of these two scenarios functioning together. One of its 'purposes' was to ease the process of meaning-making in light of the growing need for 'fast' content and its productive creation, organization, and management. At the same time, this new medium required the adaptation of the 'old' materials to the new pace of the information exchange – i.e., it was not only the excessive production of information that had to be dealt with and tackled as technology was progressing. 'Old' (non-digital) materials had to be gradually incorporated into the new systems as well, becoming a part of the information-exchange vortex. The process was two-fold – on the one hand, information was turning into a consumer commodity and, as with any commodity, had to be produced in larger amounts. On the other hand, technology (in particular, within computer sciences) was developing rapidly, allowing for the possibility of accommodating such demands.

Thus, this new technology allowed information to be distributed with ever-greater speed and in larger amounts, while concurrently, the *need* for the production of information grew. Information took the role of content that has to be constantly generated within various industries (news, advertising, marketing, and statistics, to name the most obvious ones), requiring other mediums to adjust to its pace. A truly capitalistic product, once information reaches a point of excess, reducing it becomes impossible because this would mean not only the lack of content as such but a reduction in the profitability of the enterprises that feed on this information exchange – an event that the capitalistic mode of production cannot easily permit. As a result of this transformation, information loses its 'object-weight', its 'solidity', and the status of being rooted in the 'real'. It becomes one with its by-product – noise. Moreover, it falls into the loop of an autonomous/autopoietic system of profitability, which establishes its own rules and requirements that influence the very content of such a system.

In Nick Land's writings, capitalism emerges as an all-encompassing system, which is self-destructive – but precisely due to this self-destructive quality, any 'revolution' against it becomes impossible, for there is no way of positioning oneself 'on the other side' (for there is no other side). Thus,

Capital is machinic (non-instrumental) globalization-miniaturization scaling dilation: an automatizing nihilist vortex, neutralizing all values through commensurate to digitized commerce, and driving a

⁴⁶ Baudrillard, Jean, and Sheila Faria Glaser. *Simulacra and Simulation*. Michigan: University of Michigan Press, 1995, 55.

migration from despotic command to cyber-sensitive control: from status and meaning to money and information.⁴⁷

Technology – most importantly, digitalization and the creation of the World Wide Web, plays a crucial role here, for it allows the information to circulate and infiltrate the realms of both public and private, blurring the borders between the two. Land writes on this topic as follows:

Between the private and the public there is no longer serious competition. Instead there is an evaporating social field invested solely by the defeated and stale affects of insecurity and inertia. The real tension is no longer between individuality and collectivity, but between personal privacy and impersonal anonymity, between the remnants of a smug bourgeois civility and the harsh wilderness tracts of Cyberia, 'a point where the earth becoming so artificial that the movement of deterritorialization creates of necessity and by itself a new earth.⁴⁸

To add upon this, Darren Tofts, in Memory Trade: A Prehistory of Cyberculture voices a similar assumption, claiming that subjectivity as we currently understand it has come to an end, and outlining the on-going movement towards "networked, terminal identity".⁴⁹ It is not surprising then that hypertext (which functions as a system of its own) could be easily incorporated into such a system. This not only made it easier for information to be stored, connected, and accessed – it also tapped into the motto of productivity, imposing certain tendencies on reading and writing. Linking various sources together resulted in the development of more fragmented and faster reading - an act of information/fact-seeking rather than meaning-seeking. At the same time, 'uncreative writing' became more and more encouraged as various systems began to provide space for it. The most primitive example of this is a Facebook post – even when publishing an image, the author of the post is welcomed to come up with a text to accompany it. Instagram takes this to another level when apart from generating content, it also encourages its users to include hashtags - 'functional noise'. The point of encouragement here is less of a call for self-expression than it is a call for the generation of content. Donald Theall, however, outlines the importance of such 'functional noise' (as well as advertising) because it produces mass-culture artifacts that may have poetics of their own. At the same time, they might reveal the patterns within the transformation of the language and serve as a reflection of the digital mass consciousness. Theall writes,

⁴⁷ Land, 9.

⁴⁸ Land, 29.

⁴⁹ Tofts, Darren, & McKeich, Murray. *Memory Trade: A Prehistory of Cyberculture*. G and B Arts International, 2011, 21.

Poetic creativity is not an absence in that urban mass-mediated world, for it utilizes those mediated products in assembling its artefacts. Furthermore, as everyday semiotic forms, these ads and other mass-mediated productions also carry potential as poetic signifiers. Ads innovatively utilize as well as transform phrases and images regularly used in everyday life (e.g., 'the pause that refreshes'). It is a common enough phenomenon for viewers of decontextualized sequential filmed presentations of a series of ads (such as, the 'World's Best Ads' of any year) to find them irresistibly funny. They are the very stuff of the urban circus; the materials which shape the humour of the modern 'market-place.⁵⁰

Already, Nelson's and Bush's ideas of personalized storage (wherein one can manipulate information however they want) can be tangentially fit into the frame of productivity. Consider a statement by CAE (Critical Art Ensemble), the practitioners of "tactical media" – "a form of digital intervention", the aim of which is to "demonstrate the critique through an experiential process":⁵¹

What has changed since the days of papyrus and scrolls is that the organization of information has become amazingly efficient, since the invention of computers with their massive space-saving memories combined with accurate systems for immense storage and high-velocity retrieval. Combine these powers with computer networking capabilities, which transform information into a nomadic phenomenon, and the dominance of information reality becomes unstoppable.⁵²

Information, considered from this perspective, is a crucial part of capitalism, a new locus of <u>power</u>.

2.2. Writing Cyborgs (Subversion)

The idea that the emergence of hypertext, to a degree, reflects the capitalistic need for the endless production and re-production of information within an environment that is becoming increasingly autonomized opens up space for further speculation. For instance, the new dynamics between the public and private spaces mentioned above re-emerge in a different discourse, namely that of posthumanism. In post-humanist discourse, the figure of the cyborg becomes particularly prominent – Donna Haraway's ironic hybrid, a 'techno-human'. For Haraway, "modern machinery is an irreverent upstart god, mocking the Father's

⁵⁰ Donald E. Theall. *Beyond the Word : Reconstructing Sense in the Joyce Era of Technology, Culture, and Communication.* University of Toronto Press, 2018, 75. EBSCOhost, https://search-ebscohost-com.ezproxy.is.cuni.cz/login.aspx?direct=true&AuthType=ip,shib&db=e000xww&AN=2027681&lang=cs&sit e=ehost-live&scope=site.

⁵¹ CAE, 7.

⁵² CAE, 35.

ubiquity and spirituality"⁵³ by upgrading its functionality while reducing its size. The 'miniaturization' of technology, the dichotomy of its increasingly invisible yet ubiquitous operation has transformed both the way the institutions work and the way the communication is structured within those institutions. Haraway writes:

Communication technologies depend on electronics. Modern states, multinational corporations, military power, welfare state apparatuses, satellite systems, political processes, fabrication of our imaginations, labor-control systems, medical constructions of our bodies, commercial pornography, the international division of labor, and religious evangelism depend intimately on electronics. Microelectronics is the technical basis of simulacra – that is, of copies without originals.⁵⁴

Going hand in hand with this transformation of technology is the transformation of language – Haraway observes that organisms "have ceased to exist as objects of knowledge", transforming instead into "biotic components, i.e., special kinds of information-processing devices"⁵⁵. If this was already true in 1985, when the *Cyborg Manifesto* was written, it has become progressively more relevant in current times. Members of modern society are, first and foremost, users (receivers and generators of information), and their 'quality' of being a user applies both to private and public spaces. Noticing this trend in its early stages, Haraway introduces her cyborg as a rather 'positive' figure – an outcome of the fragmented and unstable heterogeneity that is created when the natural, cultural, and machinic combine. Thus,

There are several consequences to taking seriously the imagery of cyborgs as other than our enemies. ... A cyborg body is not innocent; it was not born in a garden; it does not seek unitary identity and so generate antagonistic dualisms without end (or until the world ends); it takes irony for granted. Intense pleasure in skill, machine skill, ceases to be a sin, but an aspect of embodiment. The machine is not an it to be animated, worshiped, and dominated. The machine is us, our processes, an aspect of our embodiment.⁵⁶

For Haraway, the <u>cyborg</u> figure is, of course, more flexible – she introduces it to be 'used' within the discourse of feminism, with the potential to be applied to any socio-political discourse, which raises problematics in terms of the impossibility of categorization and unification of its members under a common umbrella of ideology. It serves as a tool for avoiding reductionism within discourses. The cyborg figure acts against generalization, embracing the fragmentary, the hybrid, and the individual, and this is where the echoes of the *Cyborg Manifesto* find their way to hypertext.

⁵⁶ Haraway, 65.

⁵³ Haraway, Donna J. "A Cyborg Manifesto: science, technology, and socialist-feminism in the late twentieth century". *Manifestly Haraway*. 1st ed. Minnesota: University of Minnesota Press, 2016, 13.

⁵⁴ Haraway, 36.

⁵⁵ Haraway, 34.

Apart from being a 'response' and an aid to the accelerating capitalistic mode of functioning of contemporary society, hypertext has been employed within the feminist discourse, many members of which have been using digital media in order to position (and reposition) their voices and make themselves heard (VNS Matrix being one of the most prominent examples). Within the feminist discourse, hypertext has been considered less of an information-storage and sharing system and more of a creative tool. Arguably, this is where the 'viral' potential of hypertext, its 'parasitic' qualities as well as its aesthetic value have been explored at their best. The 'unfinished' quality of hypertext writing conveniently reflected the idea of a purposeful withdrawal from the attempt to find a common language and the embrace of "a powerful infidel heteroglossia"⁵⁷, which has been advocated by Haraway:

Writing is preeminently the technology of cyborgs, etched surfaces of the late twentieth century. Cyborg politics are the struggle for language and the struggle against the perfect communication, against the one code that translates all meaning perfectly, the central dogma of phallogocentrism. That is why cyborg politics insist on noise and advocate pollution, rejoicing in the illegitimate effusions of animal and machine.⁵⁸

Hypertext, from this perspective, turns into an anti-logocentric, almost Derridean concept, with subversive potential. It is this element within the machine of capitalism that works both for and 'against' it (i.e., potentially serving as a disruptive element within its systems).

⁵⁷ Haraway, 67-68.

⁵⁸ Haraway, 57.

3. Hypertext: Fun and Games

Having sketched the minimal theoretical framework, it might be now helpful to consider some of the examples of hypertext fiction.

In 1977, Guy Debord devised a board game, which he called "A Game of War". The game, according to Debord, (a few minor imperfections aside), was to reproduce "the totality of factors that deal with war, and more generally the dialectic of all conflicts"⁵⁹. To a degree, "A Game of War", an imitation of strategic combat, was intended to become a simulator for the training of upcoming militants. And even if one agrees with Alexander R. Galloway's view that Debord's game is "surprisingly square", and is missing mechanisms "for overturning society", being, instead, a playground for "toy soldiers fighting a made-up war in a made-up world"⁶⁰. However, the very fact that it attempts to miniaturize and condense a situation as vast as war into the plane of a board game is significant. It becomes even more remarkable when considering the fact that a similar line of thought is repeated in relation to games, though of a different type.

In *Gamer Theory*, McKenzie Wark speculates on how computer <u>games</u> served the purpose of a "military entertainment complex",⁶¹ reflecting upon the uncanny idea that certain computer games were devised as platforms for military practice. This presupposes two things – first, the possibility of miniaturizing major spaces and situations into smaller game-spaces, and second, of defining situations and play-rules within those spaces that are then re-experienced in the form of games. Thus, when a situation (e.g., war) is placed within a space (e.g., of a board/computer game), its rules and limitations within that space become defined and, from a 'disinterested' space (if the existence of a disinterested space is ever possible), it turns into a game-space through which users/players have to navigate in accordance with pre-established rules. As Wark writes, "as the whole of space succumbs to the game, it is the logic of constraints that determines the possibilities of play."⁶² At this

⁵⁹ Galloway, Alexander R. "The game of war: an overview". *Cabinet Magazine*. Accessed on 18 Dec. 2022, https://www.cabinetmagazine.org/issues/29/galloway.php.

⁶⁰ Galloway, ibid.

⁶¹ Wark, McKenzie. *Gamer Theory*. Cambridge, Massachusetts, and London: Harvard University Press, 2007, 67.

⁶² Wark, 131.

point, the 'reality' of the space becomes relative and arbitrary – a change of the perspective might make the space more or less 'real.' As Tofts observes,

In relation to a computer-generated virtual space, for instance, our metaphysical understanding of the difference between the real world and the simulated, virtual world allows us to experience an artificial reality for what it is. 63

Thus, artificial reality might remain 'virtual' until experienced, yet once interacted with, its space and one's experience of it become 'real'. The number of situations that may become part of the game-space is nearly inexhaustible. In her analysis of various computer games, Wark points out that even the state of leisure finds its reflection in the game-space, becoming part of 'the job'. Moreover, "all acts of writing, speaking, and electronic production involve game-like aspects"⁶⁴. As a result, the border between the 'game-space' and the 'real space' attenuates, becoming more and more indistinguishable. This is already true for a Situationist-inspired board game (where does the war shift from the board/map to the 'real' space?) yet becomes even more prominent once rapid technological development becomes a factor. It is not only games that become more immersive with the emergence of virtual reality; reality itself is growing more game-like, with digital interactions embedded even in the most mundane activities (e.g., banking transactions). And while the act of the imposition of the structure or 'narrative' on situations itself is not new and has been historically performed by various socially and politically oriented institutions, the structuring of space into game-space can be considered rather unique, for the game element often poses itself as an auto-poetic 'add-on' located outside of the structure, echoing the modes of operation of technology itself.

Games and, in particular, video and role-playing games are interesting because they share a common origin with electronic hypertext fiction. Video games belong to the most accessible example of the 'game-space' manifesting itself. On the most immediate level, contemporary video games feed into the broader field of the commercial entertainment industry. Their success is often bound to their 'realism' – an attempt to recreate a fully imaginary world in an uncannily believable way, allowing the user/player to get immersed in

⁶³ Tofts, Darren, & McKeich, Murray. *Memory Trade: A Prehistory of Cyberculture*. G and B Arts International, 2011, 101.

⁶⁴ Donald E. Theall. *Beyond the Word : Reconstructing Sense in the Joyce Era of Technology, Culture, and Communication*. University of Toronto Press, 2018, 202. EBSCOhost, https://search-ebscohost-com.ezproxy.is.cuni.cz/login.aspx?direct=true&AuthType=ip,shib&db=e000xww&AN=2027681&lang=cs&sit e=ehost-live&scope=site.

the game environment. While modern video games rely heavily on graphics and sound, their direct ancestor was primarily text-based. MUDs (or multiple-user dungeons) are computer programs in which users could engage in "constructing a story by manipulating interacting characters that they have created in a "shared hallucination" – a computer environment for multiple users".⁶⁵ During the course of the game, the 'hallucination' was typed out while the audio-visual element was kept to a minimum.

MUDs provided relative freedom of movement and interaction to their characters. The act of exercising this freedom, however, had to be literally spelled out using particular cues that were pre-defined by the mechanics of the game. Thus, even though the game was in the hands of its players, they had to follow particular 'wording' for the commands to materialize (e.g., verbs such as "look", "say", "pose", "whisper" had to be added to the text to perform a particular action)⁶⁶. On the other hand, there seemed to be no discernable master plan, no pre-written plot development that the player had to adjust to. "The lack of complete control by any individual", as David LeNoir points out, "makes a MUD session an unlikely source of a complete and powerful story".⁶⁷ One may choose to see this either as a drawback or as an advantage. To explain this, it might be helpful to consider the two directions into which MUDs have diverged. The first direction is that of the electronic hypertext fiction, which borrowed the text-oriented approach (though expanding it considerably to incorporate other media as well). The second one kept the idea of the game as a basis, yet enhanced the audio-visual quality of it, thus developing into what is now known as the videogame.

The two are not fully separated, and the crossing of the genres inevitably occurs as the works become increasingly hybrid. There is, however, a difference in the general approach to storytelling. Thus, while hypertext fiction has largely embraced the instability of language and used it to 'destroy' the concept of coherence within a story, video games went a long way to purposefully arrange the gameplay into a story, as if without a narrative, a motivating premise, the game (the act of playing it) would lose its meaning. This implied the establishment of new means of interaction between readers/players/users and the need to redefine the borders and limitations between and within the mediums.

⁶⁵ LeNoir, David W. "Clueless Newbies in the MUDs: An Introduction to Multiple-User Environments". *The Clearing House*, 2.72 (1998), 106.

⁶⁶ LeNoir, 109.

⁶⁷ LeNoir, 107.

This present thesis suggests its readers informally distinguish between two slightly different 'types' of hypertext fiction, the 'works' and the 'projects'. One type comprises works of electronic hypertext fiction that, despite using a sophisticated linking system and being non-linear/non-sequential, is largely narrative-oriented and aims for a definitive ending. Once those works are finished and become available, they are to be read as a single 'finite' piece. The freedom of the reader consists in having the possibility of moving between different parts of the text in various patterns, thus building accidental reading sequences and discovering 'new' stories within the canvas of the hypertext. Many of them also work with audio-visual content, creating numerous levels of perception of, and interaction with, the works in question.

Many of those works were developing nearly at the same time as the pioneers of the hypertext theory such as Jay David Bolter and George P. Landow were attempting to define this new notion. Hypertexts such as Michael Joyce's *afternoon a story*, Shelley Jackson's *Patchwork Girl*, Mark Bernstein's *Those Trojan Girls*, Stuart Moulthrop's *Victory Garden*, John McDaid's *Uncle Buddy's Phantom Funhouse*, etc., became case studies for their works. As a result, they became known as 'hypertext classics', and have been more or less widely analyzed within 'academic' circles. Currently, however, they are hardly accessible. The majority of the works mentioned above were created using the Tinderbox and Storyspace platforms, and are now in sole ownership of Eastgate Systems Inc.⁶⁸ Those works can be purchased; however, one would need to make sure that the work is customized for the operating system one is using (all of the hypertexts listed on the Eastgate webpage are suitable for Macintosh, and only some of them for Windows). Along with the text(s), one also receives all the necessary software⁶⁹ needed to access the work.

Another way of accessing these works is through the *Electronic Literature Lab* project, the aim of which is the revival of these hypertext classics. This is done by means of staging and recording the traversals. The 'experiencing' of hypertext turns into a bizarre digital play – most often, the author of the hypertext fiction would be invited to 'traverse' their own work. The traversal would be accompanied by explanatory comments on the structural/organizational decisions the authors had once had to make along the way. The traversals are recorded and are then made available on the project's website and its

⁶⁸ Official webpage of Eastgate: serious hypertext: <u>http://www.eastgate.com/</u>. Accessed on 18 Dec. 2022

⁶⁹ E.g., Eastgate: <u>http://www.eastgate.com/catalog/PatchworkGirl.html</u>

YouTube⁷⁰ channel. Even though the aim behind this preservation/revival project is no doubt valuable, it presents hypertexts as an outdated term (somewhat feeding into the idea that hypertext fiction was a 'failure'), a trend that quickly became anachronistic. Working with hypertexts turns into the archeological work of restoration and archiving (with advanced computer skills required). Electronic hypertext fiction is treated as a moment in history when a certain type of work was circulating before coming to its relative end as technology progressed further.

Ironically, it is namely technology that made works of hypertext fiction (once a 'techno-literary miracle') outdated. In order to restore these works, one needs to utilize the advancements of modern technology to recreate the technology of the past. This can be revelatory in terms of understanding the process that guided the pioneers of hypertext fiction. However, simultaneously, such an approach turns hypertext fiction into an artifact, or a collection of artifacts, that have lost their dynamism, playfulness, and instability as soon as the systems became outdated⁷¹. In that sense, the study of hypertext fiction would not be significantly different from studying a printed work – with the difference that the works originally published in print might be more readily accessible.

The second 'type' of hypertext fiction cannot fully avoid anachronicity either. The archiving of those works/projects is already happening on different channels – online databases, one of which, for instance, is the Net Art Anthology presented by Rhizome⁷². The key difference between the Net Art Anthology and Eastgate is that the former attempts to make digital projects that, in one way or another, were utilizing hypertext, freely available (as far as it is possible to retrieve and reconstruct them). Many of the net art projects have been going on for years (MEZ's *Mezangele* being one of the prominent examples). Instead of viewing the Internet as a 'means' for writing a 'new type of fiction' adapted to the electronic environment, net art-works seem to explore the possibilities for *interactions* with the space and the reader in ways that have not been possible before. Those projects often explore and embrace the concepts of virality, parasitism, ubiquity of data, and different degrees of its accessibility – often with a political mindset in place. They, to a degree, react against the idea of the 'sanitization' of the digital space that has happened as soon as the monetizing potential

⁷⁰ Source: <u>https://www.youtube.com/c/ElectronicLiteratureLab/videos</u>. Among others, the traversals include *afternoon, a story, Patchwork Girl*, etc., a well a Live Stream Performance by Alan Sondheim.

⁷¹ Outdatedness of technology is a problem that the hypertext is bound to struggle with.

⁷² Source: <u>https://anthology.rhizome.org/</u>. Accessed on 18 Dec. 2022.

of the Net has been discovered.⁷³ They tend to recycle and reappropriate content circulating on public digital channels and social media. At the same time, they aim to create a shared platform (e.g., a blog), in which the artists can collaborate and contribute. The number of such projects is vast. To name just a few:

- YoHa collective's *Lungs* (2005), which built software that worked with the Nazicreated databases of slave workers during World War II. The software calculated the lung capacity of each worker and emitted a sound that "would displace an equivalent volume of air onto the face of a seated viewer in the gallery".⁷⁴
- M9NDFUKC.0+99 by Netochka Nezvanova (1999), a "hacker and net prankster". The software used data as "raw material", in order to mine "the artistic potential of noise, randomness, and the unexpected"⁷⁵. In particular, the unsettling flexibility of information and the problematics of its meaningfulness were addressed – visual information could be turned into sound, sound into graphics, and graphics into a computer code, etc.
- One Terabyte of Kilobyte Age by Olia Lialina and Dragan Espenschied (2010 ongoing), which fed into the larger project of the preservation of "Digital Folklore" and comprised an attempt to restore the websites from GeoCities a platform that allowed users to create their websites between 1994 and 1999. GeoCities was purchased by Yahoo! in 1999 and shuttered in 2009, with the result that its extant data existing was nearly lost. By restoring GeoCities, the project attempted to preserve the amateur, yet significant, foundations of internet-culture⁷⁶.
- *A Cyberfeminist Manifesto for the 21st Century* was a project of the VNS Matrix collective (Josephine Starrs, Julianne Pierce, Francesca da Rimini, and Virginia

⁷³ As per Donald Theall's description of sanitization, "If the Net is to be a prime electronic marketplace and disseminator of persuasive sales promotion for small businesses and powerful interest groups such as the religious right as well as large corporations, it is taken as essential that none of the potential customers or audiences be put off by their moralistic or hygienic concerns about the freedom of the Net from 'impurity'. That 'anarchic' net whose chaos produced its initial attraction to many users now must be sanitized; that is, its subversive or transgressive sectors must be: fragmentized, marginalized, partially repressed, and concealed". Donald F. Theall. "The carnivalesque, the internet and control of content: Satirizing knowledge, power and control". Continuum: Journal of Media æ Cultural Studies. 13:2. 1999. 161. DOI: 10.1080/10304319909365789. Accessed on 3 Jan. 2022.

⁷⁴ Source: <u>https://anthology.rhizome.org/lungs</u>. Accessed on 18 Dec. .2022

⁷⁵ Source: <u>https://anthology.rhizome.org/m9ndfukc-0-99</u>. Accessed on 18 Dec. 2022

⁷⁶ Source: <u>https://anthology.rhizome.org/one-terabyte-of-kilobyte-age</u>. Accessed on 18 Dec. 2022

Barratt), 1991. It "gave vivid expression to the emerging political position of cyberfeminism, which saw the new technology as an opportunity to disrupt society's patriarchal norms, and to have fun doing it". The materials generated by the members of the collective were "distributed by fax, snail mail, paste-up poster, billboard, and online post, adopting the techniques of propaganda as an art practice".⁷⁷

Despite inevitably reaching the point of exhaustion, those works still maintain the notion of continuity, the state of being a work-in-progress that is cut off and left unfinished. Viewed from this perspective, the ideas that some of those projects subscribe to share similarities with <u>avant-garde</u> art. They approach art in a rather 'communal', discursive manner. From that perspective, Net Art Anthology projects subscribe to Donald Theall's view of art and literature as inseparable from the world of communication, which is facilitated by technology. Artworks become part of a nexus of a hypermedia world. Moreover, Theall suggests that "all art is of necessity not only a *kind* of discourse, but a *part* of discourse – an ongoing communicative interaction and conversation"⁷⁸.

As a starting point, one can take a range of topics that hypertext authors have been continuously returning to – namely, the correlations between language, code, body, materiality, and virtuality.⁷⁹ Those concepts will be explored in the subsequent examples of different works of hypertext fiction, both from the Eastgate collection and the Net Art Anthology.

Patch-work. Shelley Jackson's *Patchwork Girl* (1995) opens with an image of a woman – to be more precise, with an image of a naked body of a woman, the fragments of which are held together, yet cut marks of segmented division can be seen on it. Every click of the mouse results in the disintegration of this body – its parts are displaced and 'patched' in purposefully bizarre combinations. The unity of the body is constantly being disturbed – just

⁷⁷ Source: <u>https://anthology.rhizome.org/a-cyber-feminist-manifesto-for-the-21st-century</u>. Accessed on 18 Dec. 2022

⁷⁸ Donald E. Theall. *Beyond the Word : Reconstructing Sense in the Joyce Era of Technology, Culture, and Communication.* University of Toronto Press, 2018, 224. EBSCOhost, https://search-ebscohost-com.ezproxy.is.cuni.cz/login.aspx?direct=true&AuthType=ip,shib&db=e000xww&AN=2027681&lang=cs&sit e=ehost-live&scope=site.

⁷⁹ Those are, once again, closely connected to Theall's ideas, in particular, of the importance of the body as a virtual and material concept, for "like a body-without-organs, the body receives through communication the wandering inscriptions of its environment". Theall, 225.

as the unity of the text itself is. The body also opens the pathway to the text – by clicking on it, one arrives at the directory where the key 'locations' are outlined – a graveyard, a journal, a quilt, a story, and broken accents⁸⁰. These are the locations that are co-inhabited both by the body and the text.

In her commentary to the 'traversal' (*Electronic Literature Lab* project), Shelley Jackson herself outlines the importance of the parallel that she attempts to develop throughout the narrative – that of 'writing' the body of the text and 'sewing' the physical body, which go hand in hand. Both are presented as non-unified and multi-layered constructs – they are being held together by multiple bodies (both physical and virtual, real and imaginary). Artificiality in Jackson's work does not necessarily contradict the 'naturality' of the text and the physical body – on the contrary, echoing Donna Haraway's <u>*Cyborg*</u> *Manifesto*, the monstrosity, deformity, and marginality are employed ironically and stand for the necessity to embrace the multiplicity, interconnectedness, and the patch-work quality imbedded in any 'natural' subject/object.

The text itself is sabotaged on two levels. On the one hand, the story is broken into chunks/body parts, with the narrative shifting from one part to another based on the reader's choice. Additionally, a dialogue is formed with other literary and philosophical works (including those of Jacques Derrida and Donna Haraway); however, they primarily engage with Mary Shelley's *Frankenstein*. The voice of the female monster is rediscovered by Shelley Jackson in Mary Shelley's text. Mary Shelley's text itself is cut out and embedded into the digital environment. This act of moving the 'real' paper book onto the computer screen is described very 'physically' with the notion of inherent violence:

My hijinks did not make it through the wrought iron flourishes of her prose, but they can be glimpsed in the paisley of its negative spaces, a hurly-burly of minced flesh and gouts of blood.⁸¹

The idea of the "<u>negative space</u>" lurking beneath the canvas of the 'main' story is interesting, for it implies the existence of a border beyond which the story loses control over itself – and the author loses control over the story. The reader, on the other hand, seems to be welcome to explore those negative spaces and feed upon them in their traversings and interpretations:

⁸⁰ Jackson, Shelley. *Patchwork Girl.* Eastgate Systems, 1995. Accessed on 18 Dec. 2022. http://www.eastgate.com/catalog/PatchworkGirl.html

⁸¹ Shelley Jackson's traversal of *Patchwork Girl*. <u>https://www.youtube.com/watch?v=ZHUR6phuOrc</u> (time stamp: 6:51). Accessed on 18 Dec. 2022.

To be linked to the chain of existence and events, yes, but bound by it? No, I forge my own links, I am building my own monstrous chain, and as time goes on, perhaps it will begin to resemble, rather, a web.⁸²

The passage below, to a degree, describes the very approach of the reader of hypertext – that they are part of the text-event, yet they are not 'bound' by it. Instead, they create their own chains of interaction and interpretation. Thus, instead of creating a 'stable' narrative, Jackson not only writes a fragmentary narrative of her own but also destabilizes an already created narrative. And even though, structurally, *Patchwork Girl* still maintains a sense of unity of concept with an outline of an explicable plot, they come at the cost of wandering through body-mazes in search of its missing parts.

In the part of *Patchwork Girl* titled "Accident", the physical body of the character (the female monster) starts to fall apart – she loses her leg after being run over by a cab. The leg is then found, and a funeral is conducted for it. The idea of body parts existing autonomously reoccurs in another project, Linda Dement's *Cyberflesh Girlmonster* (1995). As per the description of the project on the artist's website:

At the Adelaide Festival, about 30 women donated body parts by scanning their chosen flesh and digitally recording sound. From these, conglomerate bodies were created, animate, and made interactive.

When a viewer clicks on one of these monsters, the words attached to that body part could be heard or seen, another monster may appear, a digital video could play, a story of biological information about the physical state described by the story, may be displayed.⁸³

The lack of stability and the chance for randomness are even higher in Dement's work as compared to that of Jackson's. The body parts cease to belong to human beings and turn into digital 'monsters', the instability and fluidity of which are escalated to the highest degree. It is almost as if the digital environment was attempting to break with the assumption of its 'virtuality' and impose its presence by conjuring the imagery of the 'heaviness' of the physical body and the gore of it⁸⁴. At the same time, the randomness of the elements can be read as an extended metaphor for autopoiesis – a notion that the digital environment has, to a

⁸² Ibid.

⁸³ Dement, Linda. *Cyberflesh Girlmonster*. 1995. Accessed on 18 Dec. 2022. http://www.lindadement.com/cyberflesh-girlmonster.htm.

⁸⁴ This topic and the question of the materiality of virtuality is interestingly addressed in an article titled "A Rape in Cyberspace" (2005) by Julian Dibbell, originally published in *The Village Voice* (<u>https://www.villagevoice.com/2005/10/18/a-rape-in-cyberspace/</u>, Accessed on 18 Dec 2022). The article describes a case of a virtual rape that occurred in LambdaMOO, a MUD platform.

degree, embraced. Louis Armand defines 'autopoietic' as a "network of processes of production, transformation and destruction"⁸⁵.

This network gives rise to components which, through their interactions and transformations, regenerate and in turn realise the network or processes that produces them. At the same time these components constitute the network as a concrete unity in the space in which they exist by specifying the "topological domain of its realisation". In other words, the components of autopoietic machines generate recursively, by means of their interaction, the same network of processes by which they themselves are produced.⁸⁶

Or, from a different perspective, the technology, when applied to a digital environment, allowed one to illustrate the fluidity of static objects with more flexibility, consequently destabilizing those objects even further. This is what Jackson's work achieves as well – it forces a physical/bodily connotation upon the text that operates in a digital environment and breaks it apart, thus showing its vulnerability and its creative potential.

Anne Mangen, in her essay titled "Hypertext fiction reading: Haptics and immersion", distinguishes between two types of immersion – "technological" and "phenomenological"⁸⁷. The phenomenological immersion is related to the work of imagination when one 'disappears' in the fictional world created by the author. Technological immersion, on the other hand, is a result of the augmentation of reality (often by means of the physical intervention of "material devices"⁸⁸ – e.g., data gloves, headsets, etc.) According to Mangen,

If we take the main purpose and motivation for our reading to be that of becoming immersed in a fictional world, then the text will have to provide the necessary setting for such a phenomenological sense of presence – by way of whatever modality telling the story.⁸⁹

This line of thought suggests that the "physical and technical features of the material support" of the printed book are "ideally transparent in order to facilitate, and not disturb, phenomenological immersion"⁹⁰. Electronic literatures, on the other hand, including hypertext fiction, prevent the act of 'full immersion' from taking place – the reader is

⁹⁰ Mangen, 406.

⁸⁵ Armand, Louis. "From Symptom to Machine". *Hypermedia Joyce*. Edited by David Vichnar and Louis Armand, Prague: Litteraria Pragensia Books, 2010, 51.

⁸⁶ Armand, ibid.

⁸⁷ Mangen, Anne. "Hypertext fiction reading: haptics and immersion". *Journal of Research in Reading* 4.31 (2008), 406.

⁸⁸ Mangen, 406.

⁸⁹ Mangen, 407.

constantly disturbed and distracted by the need to make a decision, the result of which is that the possibility of the unity of the fictional world is ruined; the readers are not able to maintain full focus with their attention 'jumping' and shifting as the narrative diverges in new directions. With each new turn they are dragged deeper into the story, yet at the same time, thrown out of it back to reality.

This, as Mangen mentions, may indeed have negative consequences on the overall reading experience – this can be noticed particularly in the way online articles are read and absorbed. Often, reading occurs in a fragmented manner, with the reader having to follow one link after another if they want to get a picture of a 'complete' story as many news articles reference other articles from which bits and pieces of information are borrowed. As a result, one may read a great deal without necessarily perceiving the full depth of the situation.

However, this argument is not so straightforward. As soon as one closely inspects a printed book, the technology standing behind it becomes visible. Additionally, not all the books issued as physical objects are, in fact, aiming for immersion. The example that most readily comes to mind is James Joyce's *Finnegans Wake* (1939), which provides no narrative for the reader to rely on, but constant disturbance and confusion, and a reminder that both book and writing are artificial constructs. This idea is carried through works of postmodernism, the experimental literature of avant-garde, and, one may argue, in hypertext fiction, which continues the tradition of intentional disturbance of the reader.

Code-work. Speak to us of Emailia⁹¹.

Marshall McLuhan claimed that "the "content" of any medium is always another medium. The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph"⁹², while "the "message" of any medium or technology is the change of scale or pace or pattern that it introduces into human affairs"⁹³. It is quite easy to interpret these statements as somewhat reductionist, i.e., that *the way* the content is distributed is more important than the content *itself*. However, what McLuhan's observation points out is the complicated connection that exists between the medium-message dichotomy, focusing not only on what is written and how it is written, but also on how it is *distributed*,

⁹¹ Joyce, James. *Finnegans Wake*. Faber & Faber, 1975, III.1 410:23 (source: http://www.finwake.com/1024chapter31/1024finn31.htm).

⁹² McLuhan, Marshall. *Understanding Media*: The Extensions of Man. London and New York: The MIT Press, 1994, 10.

⁹³ McLuhan, 10.

and how this distribution in turn affects the form (and potentially the content) of the text. In a similar 'McLuhian' vein, Donald Theall states that a medium

should be treated as an interactive node, and as a mode of producing, transmitting and/or distributing communication that has a formative power over how the everyday world evolves, but which is also modified by the priorities of that everyday world. Technics do not rigidly determine certain events; they interact with them, opening up various possibilities, amplifying programs, undermining resistance to change, and in the process being themselves transformed.⁹⁴

These notions are, yet again, somewhat Derridean – the signifier never leads to the final, ultimate signified, but to another signifier, creating a multi-layered system of significations. At the same time, the 'migration' of the content from one medium to another and its 'extension'/'expansion' across new mediums (which then, from being simply 'channels' turn into environments of their own, simultaneously altering other 'older' planes of environment and interaction – as happened with the virtual/digital world), echoes the act of reterritorialization – a concept proposed by Giles Deleuze and Felix Guattari:

We have gone from forces of chaos to forces of the earth. From milieus to territory. From functional rhythms to the becoming-expressive of rhythm. From phenomena of transcoding to phenomena of decoding. From milieu functions to territorialized functions. It is less a question of evolution than of passage, bridges, and tunnels. We saw that milieus continually pass into one another. Now we see that the milieus pass into the territory. The expressive qualities we term aesthetic are certainly not "pure" or symbolic qualities but proper qualities, in other words, appropriative qualities, passages form milieu components to territory components. The territory itself is a place of passage.⁹⁵

The impact of technology is crucial here. Yet, for McLuhan, technology does not have to be advanced and does not necessarily refer to the late-industrial era. It starts as early as writing, which, as a technology, transformed its 'content' – speech. As per McLuhan, "writing affects speech directly, not only its accidence and syntax but also its enunciation and social uses".⁹⁶ The influence, thus, is 'situationist' – by being recorded, speech becomes preserved and more widely distributed, and, to a degree, standardized. Writing ensures its 'permanence' but sacrifices a portion of its spontaneity and flexibility. Similarly, with the appearance of the printing press, written text could be produced and *re-produced*, which altered not only the understanding of the concept of text (predominantly, as a printed product)

⁹⁴ Donald E. Theall. *Beyond the Word : Reconstructing Sense in the Joyce Era of Technology, Culture, and Communication.* University of Toronto Press, 2018, 98. EBSCOhost, https://search-ebscohost-com.ezproxy.is.cuni.cz/login.aspx?direct=true&AuthType=ip,shib&db=e000xww&AN=2027681&lang=cs&sit e=ehost-live&scope=site.

⁹⁵ Deleuze and Guattari, 322-323.

⁹⁶ McLuhan, Marshall. The Gutenberg Galaxy. University of Toronto Press, 1962, 35.

but also of the idea of how such texts should be written (i.e., texts being created with the purpose of their re-production and mass distribution).

Another important milestone encompassed the events of the emergence of audiovisual mediums – photography, radio and, eventually, television, which have altered humans' perception of the sound and the image as well as their idea of connectivity. What has happened to the communication and media technology since then has been a process of "renovation" rather than "innovation."⁹⁷ As Tofts points out,

however dramatic it was in its significance for global communications, the Internet could not shock in the way that the cinema or television did, since it extended and intensified an already stable set of cultural expectations about telecommunications that had modified our perception of time and distance for at least fifty years ...⁹⁸

From that perspective, hypertext seems to fit the logical 'renovative pattern' of technological advancement – once it became possible for the text to 'migrate' to the digital environment, it had to make itself suitable for the new medium, which is link-based and wherein the information has to be exchanged at a higher speed, made readily available for extraction, reading, and sharing. This inevitably affected the act of writing and the processes of production, performance, and 'behavior' of texts once they migrated onto the computer screen. Not only text, but *language* itself had to be re-adapted in order to find equivalents to the 'alien' virtual phenomena within the terms of the familiar 'real' world. The peak of all this is the emergence of computer code – a language with performative qualities – autonomous and different from anything known before.

Programming languages are different from 'human' languages, for they function in an isolated, command-based environment, where the sender-receiver dynamic is still relatively primitive yet extremely powerful. Programming languages operate as strictly defined systems that, nonetheless, have the potential of developing autopoietic qualities and/or malfunctioning. While using 'human' languages as a basis for their operation, programming languages, at the same time, alienate them. Language can no longer be accounted for simply as a means of communication within a society/between individuals, but instead is utilized as a new form of interaction – that between a human and a machine as well as between the machine/program and the data that is being fed to it.

⁹⁷ Tofts, Darren. "Century of change? Media arts then and now." *Hyperrhiz: New Media Cultures*, no. 08, 2011. doi:10.20415/hyp/008.e01

⁹⁸ Tofts, ibid.

Hypertext fiction tends to disturb not only the reader but language itself. Florian Cramer opens his essay "Digital Code and Literary Text" with the following question:

Can notions of text which were developed without electronic texts in mind be applied to digital code, and how does literature come into play here?⁹⁹

This question is interesting, for it addresses both *the text* of the hypertext itself and the text *behind* hypertext that makes the functioning of hypertext possible (i.e., the 'code'). Code, as Cramer points out, defines the structures inherent to any form of writing. Just as the term 'writing' itself bears the connotations of both a second-grade physical act inferior to speech and the first-grade order (writing of Nature), code stands for both a physical unit of language and a behavioural pattern – the code of conduct that dictates the reader's approach to text (the act of decoding the text). It not only introduces the rules of the formation of word-and sentence-sequences but also the 'instructions' for interacting with those sequences:

In literature, formal instructions is the necessary prerequisite of all permutational and combinatory poetry. Kabbalah and magical spells are important examples as well. But even in a conventional narrative, there is an implicit formal instruction of how - i.e. in which sequence - to read the text (which may be followed or not, as opposed to hypertext which offers alternative sequences on the one hand, but enforces its implicit instruction on the other). Grammar itself is an implicit, and very pervasive formal instruction code.¹⁰⁰

From here, one might conclude that, on the most basic level, hypertext, overrides the 'code' of linear reading while establishing the new 'rule' – that of alternative options and of fragmentary shifting between parts of the text that ultimately form the reading experience. The situation, however, becomes more complicated when it comes to net.art. With Alan Sondheim introducing the concept of 'codework', an additional perspective has to be taken into consideration. Sondheim writes:

What is code in the first place? – obviously it can either be a PROGRAM which PRODUCES a residue – or it can be a CARRIER of meaning. This depends on the semiotic encodings as well as the PERFORMATIVITIES at work. A code may or may not perform – in the sense that it may or may not create a result that one might characterize ontologically and/or epistemologically as AN OTHER.¹⁰¹

Rethinking the hypertext structure with that in mind, one can derive two 'scenarios' of its functionality. Scenario one: the computer code behind hypertext is invisible. Hypertext is

⁹⁹ Cramer, Florian. "Digital Code and Literary Text". *Dichtung Digital. Journal für Kunst und Kultur digitaler Medien* 3.20 (2001), 1.

¹⁰⁰ Cramer, 6.

¹⁰¹ Sondheim, Alan. "Notes on codework". *Nettime*, 2004. Accessed on 18 Dec. 2022. https://www.nettime.org/Lists-Archives/nettime-l-0402/msg00028.html

fully functional. Code fulfills its performative purpose. Scenario two: Code is made 'visible' – its skeleton is unveiled beneath the 'skin' of the hypertext. Code is written (and potentially rewritten) not with the purpose of making something (e.g., hypertext) work, but with the purpose of making its [code's] own existence manifest. This is a non-operational, politically oriented code – a pseudo-code. Is it still performative or purely aesthetic?

The operationality/non-operationality of the code becomes an important question when thinking of net.art. For Sondheim, computer code had the potential to produce texts that "take nothing for granted".¹⁰² For Cramer,

... program code contaminates in itself two concepts which are traditionally juxtaposed and unresolved in modern linguistics: the structure, as conceived of in formalism and structuralism, and the performative, as developed by speech act theory.¹⁰³

Rita Raley sees the codework as a direction in art itself for it

brings components of code to the surface and intermingles the characters of natural and machine languages, this strain of codework presents a fusion at the level of language, substituting for, and functioning as, the figure of the cyborg. Like the cyborg, codework violates the categorical and epistemological boundaries between the organic and the inorganic, the public and the private, the visible and the hidden.¹⁰⁴

Or, rather, it simply emphasizes the fact that such 'boundaries' (e.g., between organic and inorganic) are not as straightforwardly defined as they are often believed to be. The idea of organicity is, yet again, shattered – after the major damage has already been done by James Joyce. *Finnegans Wake* strips language of its conventional symbolism and reveals its 'contamination' and viral quality. Joyce's destabilized language is a code with an 'outdated' interface – a page of a printed book. By revealing the 'skeleton' of the code, its very notion of 'functionality' becomes questionable. The fact that one cannot judge (without specific knowledge) whether the computer code is machine-executable or not is 'unsettling' – it allows space for 'the game of the virus', which plays with "the confusion and thresholds of machine language and human language", and reflects "the cultural implications of these overlaps".¹⁰⁵ As with the concept of the cyborg, it erases the differences between 'machinic' and 'human' languages – human language is machinic, and machinic language is inevitably 'human' for it was articulated by humans and is interpreted, perceived, and theorized upon *by*

¹⁰² Sondheim, ibid.

¹⁰³ Cramer, 9.

¹⁰⁴ Raley, Rita. "Interferences: [Net.Writing] and the Practice of Codework". *Electronic Book Review* (2002). Accessed on 18 Dec. 2022. http://electronicbookreview.com/essay/interferences-net-writing-and-the-practice-of-codework/

¹⁰⁵ Cramer, 7.

humans. What we are faced with is not categories of languages but a multiplicity that *is language*.

Authors like MEZ (Mary Ann Breeze) play with this idea using the code language itself. MEZ 'discovers' her Mezangelle through emails, in "the fragments of programming language-shards ... operating system[s], ... directory-structures ... booleanisms, unix shell commands, html + java script conventions", etc¹⁰⁶. Those impersonal, 'machinistic' bits of language come together to form poetry, which is self-referential, metatextual, and, at the same time, code-like in terms of its form. Despite attempting to 'confuse' its reader by making words indistinguishable, MEZ's poems cannot avoid being accessible, reflecting the readers' tendency to interpret language and find 'meaning' in it. The title chosen for the book of collected poems/emails created in Mezangelle, *Human Readable Messages* (2003-2011) reflects that to a degree. The confusion and multiplicity are inherent to language, yet what the reader is seeking is the 'sense' in the non-sensical (i.e., the stability of meaning). Mezangelle both reinforces and disturbs this demand. Consider these few examples from various poems written in Mezangelle (see also the footnotes):

1.1.13 [f]lip fi[l]t[ers]¹⁰⁷ (2003-06-14 14:18)
.b>gat.
.froz>[h]e[lle]n botox chill grinning
.broke dan.ger[m]ous¹⁰⁸ + spiced by snow N slee[p]t
.mobile vile reads: co joined txt>s[ms]peakin¹⁰⁹
.do u c tree struc[alan]turin¹¹⁰

[a.gain>st¹¹¹] ¹¹²

or

eng.leash is not a static language [do u think that english sprang forth fully formed from the (foaming) mouths of anglo-celtic-germania gods? & correspondingly, that its position is fixed in stone, & that the x.tra words they end up shoveling in2 dictionaries r simply 2 be scorned as neologistic heresy?

¹¹² MEZ, 34.

¹⁰⁶ Breeze, Mez (MEZ). Human Readable Messages: Mezangelle 2003-2011. 1st ed. Trauma Wien, 2011, 28.

¹⁰⁷ Flip filters/lip fit – connecting with en botox-hellen/frozen botox/botox-hell in botox few lines below.

¹⁰⁸ Germs rediscovered in danger.

¹⁰⁹ Text is more than sms, and yet sms is text. At the same time, MS (Microsoft) is peaking.

¹¹⁰ Alan Turing is hiding in the act of structuring.

¹¹¹ Again and against.

	also, do u also adhere 2 the notion that the methods of communica
	on the resultant conception of new modes that negotiate the function[s] of
	language?] ¹¹³
or	
	just bah!, really
	Kant. we. view. language[s]. thru. a. Moore. fluid. Filter ¹¹⁴
or	
	1.5.4 re.Ad[vetising]Jistment (2003-10-16 08:35)
	non-n[u(n)clear]arrative ban.d[og].width[+length +uber.vocal.height] [unpack.ur.chords.+.data.growl]
or	
	2.9.6. t[ender]error] (126)
	4.12.6 command: d[sh]e[(i)lli]ad-coloured fictio (2006-12-27 07:07) Ctrl + ¹¹⁶

One of the most interesting points about the poems above is the silent subversion not only between the form and the meaning but between the layers of meaning themselves. One can consider this to be another level of "transformation of the comic grotesque" – a quality within the experimentation with language that Donald Theall assigns to the works of Francois Rabelais and James Joyce¹¹⁷. Thus, "eng.leash is not a static language", and yet, a leash is figuring in its non-static quality. The encouragement to view the language through a "Moore. Fluid. Filter" 'contains' Moore and Kant. Advertisement is an adjustment. The nuclear narrative is 'hiding' within its non-nuclearity. The "dead-coloured fictio" is "illiad" yet deprived of its unity by orthographical symbols. Thus, for MEZ, every single word has a potential for disruption, every word carries a bit of chaos in it. An attempt to structure words leads to further chaos, the Ctrl key does not always work. The computer code runs until it encounters an error – a threshold of randomness. Historically, storytelling has created a myth of unity around the language, at the same time, hiding the mechanisms of its manipulation. Programming languages do not destroy this unity per se, yet they go beyond the façade of

¹¹³ MEZ, 39.

¹¹⁴ MEZ, 42.

¹¹⁵ MEZ, 57.

¹¹⁶ MEZ, 245.

¹¹⁷ Donald E. Theall. *Beyond the Word : Reconstructing Sense in the Joyce Era of Technology, Culture, and Communication.* University of Toronto Press, 2018, 50. EBSCOhost, https://search-ebscohost-com.ezproxy.is.cuni.cz/login.aspx?direct=true&AuthType=ip,shib&db=e000xww&AN=2027681&lang=cs&sit e=ehost-live&scope=site.

storytelling (prioritizing performativity), which has an alienating effect of exposing the constructs that the language is built on (arguably far more effortlessly than linguistics would be able to do it).

4. Hypertext: Negative Spaces

4.1. Who are you, the reader?

This chapter will explore the importance of negative spaces within the concept of hypertext. A 'negative space' will be understood as a lack, an emptiness that fails to be filled – yet it is an emptiness that has a significance of its own. An example of negative space has already been mentioned in relation to Shelley Jackson's work. Two additional examples of negative spaces will be considered here – the negative space that is created when the roles of the reader/writer become interchangeable, and the negative space that is created when text interacts with its environment (be it 'virtual' or 'material'). The first step in doing this is to establish the vagueness of these oppositions, which are problematized when hypertext – and especially electronic hypertext – is considered.

To begin with, one should question whether the acts of writing and reading are, in fact, as different as they have often been considered to be. Roland Barthes, who is often quoted in relation to hypertext, in his S/Z, introduced the famous distinction between readerly and writerly texts. Barthes writes:

What evaluation finds is precisely this value: what can be written (rewritten) today: the *writerly*. Why is the writerly our value? Because the goal of literary work (of literature as work) is to make the reader no longer a consumer, but a producer of the text. Our literature is characterized by the pitiless divorce which the literary institution maintains between the producer of the text and its user, between its owner and its customer, between its author and its reader. This reader is thereby plunged into a kind of idleness – he is intransitive; he is, in short, *serious*: instead of functioning himself, instead of gaining access to the magic of the signifier, to the pleasure of writing, he is left with no more than the poor freedom either to accept or reject the text: reading is nothing more than a *referendum*. Opposite the writerly text, then, is its countervalue, its negative, reactive value: what can be read, but not written: the *readerly*. We call any readerly text a classic text.¹¹⁸

This distinction seems to be perfectly adaptable to the purpose that Bolter and Landow attempted to assign to electronic hypertext – i.e., that it will be able to grant the readers the freedom of traversal through the text, and the chance to build a narrative of their own. The written text, since it cannot be fully removed from the equation, will serve the function of a tool (or a collection of tools) that would help the readers assemble their own story. However, if one is to read Barthes further, one would come across the following phrase: "the writerly text is not a thing, we would have a hard time finding it in a bookstore"¹¹⁹ – or one may add, in an electronic library. Thus, one may interpret Barthes'

¹¹⁸ Barthes, Roland. *S*/*Z*. 9 ed. Oxford: Blackwell Publishing, 2009, 4.

¹¹⁹ Barthes, 5.

idea of writerly text not as an actual 'physical' text, but rather as the text 'ideal' – and the question would be not so much of its existence per se, but of one's approach to text as such. In Barthes' ideal text:

... the networks are many and interact, without any one of them being able to surpass the rest; this text is a galaxy of signifiers, not a structure of signifieds; it has no beginning; it is reversible; we gain access to it by several entrances, none of which can be authoritatively declared to be the main one \dots ¹²⁰

Here, it is possible to view the comparison with networks in favor of electronic hypertexts while considering the multiple possibilities of traversing the text that they provide. An arguably more interesting way to look at this statement, however, is to put the clear-cut distinction between the acts of writing and reading aside and embrace the idea that any act of writing is an act of reading (or reflecting on the materials already read), and the act of reading is, at the same time, an act of writing (through the work of interpretation, where the text is 'rewritten' as the reader chooses how to approach it). This requires an active and alert reading practice that happens concurrently with interpretation. Interpretation is an anachronistic act that is built largely based on the reading and writing of the past. Therefore, the act of reading 'writerly' text is closer to the process of horizontal/rhizomatic linking (the interpretation is never brand new) rather than to a vertical one.

One may thus conclude that a writerly text is, in fact, any text – if one is to approach it with a particular idea of interpretation in mind. This applies to hypertext as well, and, in fact, brings it closer to Nelson's original definition of hypertext as (non-linear) writing. Barthes distinguishes between two spaces within the writerly text:

Analytically, connotation is determined by two spaces: a sequential space, a series of orders, a space subject to the successivity of sentences, in which meaning proliferates by layering; and an agglomerative space, certain areas of the text correlating other meanings outside the material text and, with them, forming "nebulae" of signifieds.¹²¹

Here, the sequential space is the 'physical'/linguistic space that gives the text its immediate meaning, while the 'agglomerative' space is the negative space – the space of metatextuality and interpretation, which stays invisible until one purposefully chooses to see it. One may claim that hypertext brought this negative space of metatextuality to the surface when Nelson declared hypertext to be a system of linking that involves both reading and writing.

The fact that the concept of hypertext, when it did emerge in theory, was closely related to modern technology and the development of the computer sciences, made the

¹²⁰ Barthes, 5.

¹²¹ Barthes, 8.

'problem' of the reader even more obvious. Who is the reader of hypertext? Is it the computer program that reads the code and is executing a particular command based on this reading? Is it the reader sitting in front of the computer screen? Is it, the writer, who, throughout the process of creating hypertext has to interact with the software, and, therefore, 'read' its interface? With the emergence of computers, reading and writing became interconnected as no technology had allowed them to before – in order to write, one first had to read (not necessarily a text, but pictorial signs, icons, etc.).

Both readers and writers are users of technology. Since technological 'devices' facilitating the proliferation of information in form of text (be it the printing press, a typewriter, or a computer) were based on the principle of reading – the output was created to be read as well. This, however, reflected not so much the course of technological advancement, but the vicious circle of the ruling principle of human functionality – the need to interpret the 'unnamable', to categorize and make the world around us 'readable'. This is why the emergence of AI that would be autopoietic became so uncanny – the risk of it producing something unreadable is difficult to come to terms with.

In his essay, *Cybernetics and Ghost*, Italo Calvino makes an interesting observation – first, he points out the mechanical quality of writing – any act of writing performed by a human being or a machine:

The so-called personality of the writer exists within the very act of writing: it is the product and the instrument of the writing process. A writing machine that has been fed an instruction appropriate to the case could also devise an exact and unmistakable "personality" of an author, or else it could be adjusted in such a way as to evolve or change "personality" with each work it composes. Writers, as they have always been up to now, are already writing machines; or at least they are when things are going well.¹²²

Second, describing the autopoietic machine, Calvino imagines a device that would not become a tool for avant-garde writing, which for him 'promotes disorder'. The "true literature machine"¹²³ for Calvino, would be traditionalist at first, and later, getting 'tired' of its own traditionalism, would switch to something more 'experimental'. This idea, as interesting as it might be, still falls into quite a human-centered view of writing and reading and implies a single route of progression – from traditional (classicist) to 'experimental'. It is very tempting to imagine a fully autonomous 'literature machine' as something unreadable, something that cannot be interpreted – an ultimate glitch. However, even this idea is bound to

¹²² Calvino, Italo. "Cybernetics and Ghosts". *The Uses of Literature*. San Diego, New York, London: Brace & Company, 1986, 13.

¹²³ Calvino, 11.

words and signs – the unreadable cannot exist because it has already been given a name – it is something that 'cannot be read'/cannot be interpreted – which is its interpretation. This is a closed structure ruled by logocentrism that Derrida keeps coming to and that cannot be transgressed.

The reader thus is the negative space that makes 'everything' possible – the reader interprets and names, yet this act is never 'up-to-date'. When one enters the world of significations, it is as if 'everything' has been interpreted prior to our existence – things were already named – things were 'always' named. Notice how, despite the advancement of computer technology, the words that are used for naming newly emerging terms often extend the meanings of already familiar words (e.g., folders, mouse, and keyboard to name the most basic ones), and neologisms borrow inspirations from the past (e.g., metaverse, the portmanteau of the Greek "meta" and English "universe"). Postmodernists might have been correct in stating that all that could have been said has already been said, while we are left with recycling the concepts of the past and adapting them to new uses.

4.2. Into the labyrinth

In the center of each gallery is a ventilation shaft, bounded by a low railing. From any hexagon one can see the floors above and below-one after another, endlessly. The arrangement of the galleries is always the same: Twenty bookshelves, five to each side, line four of the hexagon's six sides; the height of the bookshelves, floor to ceiling, is hardly greater than the height of a normal librarian.¹²⁴ Every text is a labyrinth – it is referential and contains within itself a legacy of other

texts, whether this is explicitly noticeable or not. Apart from referentiality, however, text manifests itself not only through what is written but also through what is left unwritten – the visible spaces that are not occupied by text. Stretched to hypertext, this notion is somewhat similar to the concept of 'non-places' Louis Armand writes about in his essay "Strange Attractions: Techno-Poetics in the Vortext",

The ideas of repetition, generative constraint and probability bring into focus a fundamental characteristic of hypertext – that of *transversal*. Transversality might be thought of as a particular kind of punctuation or puncturing (bifurcations, ruptures, discontinuities, cancellation), suggestive of a network of what Marc Auge calls "non-places" and what Helene Cioxus refers to as ... a "zero of dimension" or *punctum* between what has previously been thought as the "inside" and "outside" of language. Non-places describe a form of mechanical copula between instances of repetition and difference in the matrical organisation of sign systems.¹²⁵

¹²⁴ Borges, Jorge Luis, and Andrew Hurley. "Library of Babel" in *Collected Fictions*. London: Penguin Books, 1999, 112.

¹²⁵ Armand, Louis. "Strange Attractions: Techno-Poetics in the Vortext". *Contemporary Poetics*.Edited by Louis Armand. Northwestern University Press, 2007, 190.

Post-modernists as well as members of avant-garde movements have been known for their interest in such negative spaces and the potential of the 'emptiness' of language that can be interacted with. The format here is of little importance, for these negative spaces are present in any medium - be it the pages of the book (which poets like Stephane Mallarme and Guillaume Apollinaire actively utilized), musical compositions, and tape recordings (John Cage's 4'33 or Henri Chopin's tapes that paid attention to pauses, silences, and breathing sequences), or the computer screen. Interestingly enough, the computer screen has perhaps less obvious possibilities of active interaction with the negative space - one can attempt to do it within the programming code, as does Mezangelle, for instance; however, on the screen, where most of the elements are pre-defined by the interface, the negative spaces are created mostly as a result of glitches or virus-works. However, as a totality, the 'nature' of the Internet is closer to that of a negative space because it consists of links that are not permanent - they are always at risk of becoming inactive, with their content becoming permanently lost or inaccessible due to technology/software updates. If the World Wide Web was a house, it would have been extremely difficult to sketch its map; its corridors would constantly change their locations, making some of the rooms unreachable¹²⁶.

The metaphor of the house lends itself to further discussion and, using it, one may consider some of the examples of how negative spaces tend to interact. This will be done by briefly looking at Mark Z. Danielewski's *House of Leaves* (2000) and Doug Dorst's and J.J. Abrahams' *S* (2013). These texts will be viewed as "technotexts" according to Katherine Hayles' definition. A technotext is a text that "at once interrogates and produces its material form".¹²⁷ For Hayles, any text can function as technotext "given that all texts are mediated and actively consumed, whether they reflectively embody this or not¹²⁸".

It has already been mentioned that the idea of the virtuality and the materiality of both printed and electronic texts is problematic. The electronic text is never truly 'virtual'; it has physical machinery standing behind its production and operation, even if the result is rather

¹²⁶ Here, one may recall Darren Tofts' writing on the topics of labyrinths and architecture: "The analogy between virtual, semantic spaces and actual buildings is grounded in the "fundamental human ability" of physical action. It is perhaps for this reason that architecture has been drawn on as a conceptual, as much as a design principle, of cyberspace. Architecture is concerned, above all else, with the abstract qualities of space". Tofts, Darren, & McKeich, Murray. *Memory Trade: A Prehistory of Cyberculture*. G and B Arts International, 2011, 109.

¹²⁷ Thoburn, Nicholas. *Anti-book: on the art and politics of radical publishing*. Minnesota: University of Minnesota Press, 2016, 5.

¹²⁸ Katherine Hayles as cited in Thoburn, 6.

'ethereal' at first glance. Thus, the aspect of materiality is relevant in terms of both printed and electronic texts. Perhaps one difference is that the physical book, apart from its material qualities, can function as an ideological 'object', becoming part of object-fetishism, which is more difficult to 'achieve' in a digital environment. Printed books have often been defined not only in accordance with their information/content-carrying quality, but also as 'artifacts' – as objects that are stored, archived, and passed along. Thoburn calls this "the unsettling powers of the collected object,"¹²⁹ which is at times autonomous from the content of the book. One may claim that hypertext helps rethink the notion of the text as an artifact or explore its 'artefactual' qualities in new, destabilizing ways. It is not only electronic hypertexts that tend to do that – the act of 'destabilizing' has already begun with printed books that experimented with the idea of the 'monumentality' of text. This was often done by experimenting with the format of the book and exploring its material qualities and blank/negative spaces. Yet again, the 'paperspace' of James Joyce's *Finnegans Wake* comes to mind:

So why, pray, sign anything as long as every word, letter, penstroke, paperspace is a perfect signature of its own?¹³⁰

"The Manifesto of ALP" overemphasizes writing as a physical act. The result of the act of writing - a letter - is an artifact. Apart from words and pen strokes, there also exists the 'paperspace', which is fluid in its quality: "Another point, an addition to the original sand, pounce, powder, drunkard paper or soft rag used ... it has acquired accertions of terricious matter whilst loitering in the past"¹³¹. Paperspace is ambiguous – on the one hand, it 'creates' artifacts, and on the other, works against the very unity of these artifacts. The 'book' has been hailed to be a wholesome object, wherein the elements fit together perfectly so that the reader can forget about the materiality thereof and 'immerse' themselves in reading. This, however, is controversial, for once the act of writing interferes with the paperspace, the 'unity' thereof is breached; and the book then becomes an amalgamation of various elements, some of which are by-products of the medium and the space that the text occupies.

The two books mentioned earlier – Danielewski's *House of Leaves* and Dorst and Abraham's *S* are interesting because they both work around (and against) the idea of the monumentality of the printed book. Despite their non-linear format, the narratives themselves

¹²⁹ Thoburn, 79.

¹³⁰ Joyce, Finnegans Wake I.5: 115.6-8 (source: <u>http://www.finwake.com/1024chapter31/1024finn31.htm</u>)

¹³¹ Joyce, Finnegans Wake I.5:114.21-29 (source: <u>http://www.finwake.com/1024chapter31/1024finn31.htm</u>)

form relatively coherent stories. One finds it easy to follow the narrative. However, in order to do this, the reader needs to make a formal decision of how to navigate through the paperspace they encounter. Both books approach reading as an active process. While for the characters of *S*, the act of reading creates a platform for communication and for writing a 'story' of their own, *House of Leaves (HoL)* presents reading as a paranoidal and alienating activity – even a dangerous one, for a too active reading might turn into writing (as it happens with the narrator of *HoL*, who, after the discovery of Zampano's manuscript, feels the need to write an introduction and additional notes to it, somewhat echoing the mad narrator of Vladimir Nabokov's *Pale Fire*).

An attempt to 'read' a text turns into a labyrinthine experience – HoL reflects this by turning the book itself into a labyrinth, while S presents a book as a constant work-inprogress, challenging the idea of the finality of the text after it is printed – one can alter it by interfering with the paperspace, e.g., by adding notes on the margins and inserting random materials in-between its pages, (such as a napkin with a map drawn on it or a postcard), which then create a narrative on its own.

HoL beings with the discovery of a negative space – an uncanny labyrinth, which starts behind one of the doors of an establishment that is supposed to be 'safe' – a family house. The space of the labyrinth, defying the laws of physics, poses itself as something terrifying, yet attractive for exploration. The labyrinth has no obvious structure – it is constantly changing, with its autopoiesis following no specific pattern. The inability to fully understand and define it grows to haunt and dominate the narrative – not only through the actions of its characters, but through the formatting of the book itself as the text begins to twist, cross itself out, and self-reflect in mirroring frames.

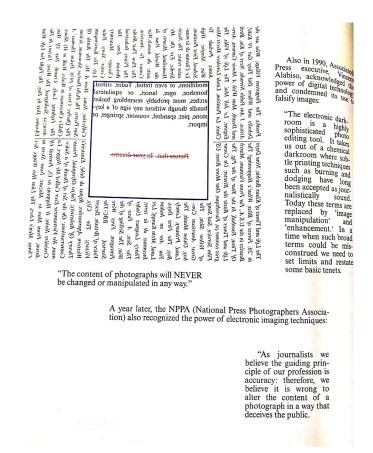


Image 1.¹³²

HoL speculates on the question of the labyrinths as follows:

If the work demanded by any labyrinth means penetrating or escaping it, the question of process becomes extremely relevant. For instance, one way out of the any maze is to simply keep one had on a wall and walk in one direction. Eventually the exit will be found. Unfortunately, where the house is concerned, this approach would probably require an infinite amount of time and resources. ... Unfortunately, the anfractuosity of some labyrinth may actually prohibit a permanent solution. More confounding still, its complexity may exceed the imagination of even the designer.¹³³

Books are such labyrinths. S illustrates this by providing an example of how a

narrative can be created on the backdrop of a book that has already been printed. It is an act of vandalism, a 'violation' of the paperspace – the characters leave permanent traces on the margins of the book, diverting the readers' attention from the 'main' narrative. In fact, their story overpowers the body of the printed text – the interpretation becomes more important than the original work.

¹³² Danielewski, Mark Z. *House of Leaves*. 2nd ed. New York: Pantheon, 2000, 142. Scan made by the author of the thesis.

¹³³ Danielewski, Mark Z. House of Leaves. 2nd ed. New York: Pantheon, 2000, 115.

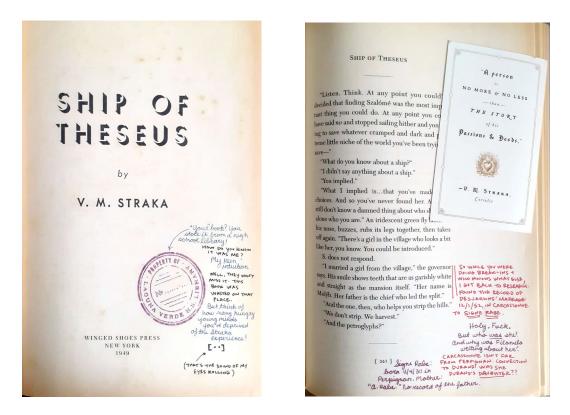


Image 2.134

Image 3. 135



Image 4. 136

¹³⁴ Abrahams, J.J., and Doug Dorst. *S*, title page. 1st ed. New York: Mulholland Books, 2013. Scan made by the author of the thesis.

¹³⁵ Abrahams, J.J., and Doug Dorst, ibid., 361. Scan made by the author of the thesis.

¹³⁶ Abrahams, J.J., and Doug Dorst, ibid., end page. Scan made by the author of the thesis.

The paradox, of course, is that neither House of Leaves nor S are, in fact, 'labyrinths' - they are what one may call 'stylized labyrinths.' None of the formatting elements of the two books are accidental - every crossed-out line and 'hand-written' note is placed on the page with a specific purpose in mind. While the two works show what a book *might* do to paperspace, they simultaneously pay tribute to the monumentality of the book as an object. *HoL* toys with the idea of hypertextuality and hyperlinking by changing the color of every instance of the word "house" in the text to blue, thus, for a second, attempting to persuade the reader that there is 'more' to the format of the book than there seems to be – that if only the reader was to 'click' on the 'link', they might have been led somewhere else, which, of course, proves to be impossible as far as the printed medium is concerned. S presents itself as a "Book for Loan", which turns out to be a false promise as soon as one purchases the book from a bookstore. Thus, there is an inherent irony when the two books are concerned - on the one hand, they are aware of the paperspace and do a good job illustrating how flexible it can be, working not only with text but with the negative spaces that are created as a result of typesetting. Yet, on the other hand, they tend to over-engineer this process – the outcome is a highly formalized (book-)artifact that is both a tribute to the 'norm' and a promise of the transgression thereof. Such works are refreshing for they allow analyses of instances of hypertextuality beyond the digital environment.

5. Hypertext and Remediation

We deconstruct the 'givenness' to show the cracks that structures have patched, to demonstrate that what is taken as privileged discourse is merely a construction that conceals power and self-interest.¹³⁷ I think a picture is more like the real world when it is made out of the real world.¹³⁸

As has been outlined in the introduction, the present thesis attempts to put the concept of hypertext to the test in various contexts in order to enrich the understanding of it. This final chapter suggests testing a proposition that what hypertext 'did' to the notion of text is, to a certain degree, similar to what abstract expressionism did to art within the avant-garde movement. This, of course, is not to suggest that the two function in an identical way, however, certain parallels exist, in particular, in terms of their embracement of technological innovation. This notion has been outlined already by Darren Tofts, for whom "forged out of the crucible of technological, scientific and artistic change, the modernist avant-garde gave rise to the most intense period of artistic innovation and experimentation in history"¹³⁹. Moreover, "the fetish of cyberculture as transcendence by technological means was the equivalent of modernism's ecstatic embrace of the machine as the agent of epochal change"¹⁴⁰. In both instances, the acceleration of technological development gave rise to new tools and machines, which were not only theorized about but were actively utilized by artists in their art projects. Artists became artisans, working 'the machines'. The machines, on the other hand, became a part of 'art' - thus, "hypertext is a good example of how a simple piece of connectionist software, used for embedding and compacting large amounts of data, has come to form the basis of a thriving, emergent art form."¹⁴¹

The proposition of the parallel between hypertext and avant-garde functions on two levels – the 'practical' and the 'ironic'. The 'practical' aspect of the parallel suggests that both hypertexts and the works of artists who can be loosely grouped under the umbrella of the 'abstract expressionist movement' (Jackson Pollock, William de Kooning, and Robert Rauschenberg among them), are to be viewed as a means of achieving the aim of making the

¹³⁷ CAE (Critical Art Ensemble). *DIGITAL RESISTANCE: EXPLORATIONS IN TACTICAL MEDIA*. 1st ed. New York: Autonomedia, 2001, 8.

¹³⁸ Rauschenberg, Robert. Source: MoMa, Artist's Page (<u>https://www.moma.org/artists/4823#works</u>). Accessed on 18 Dec 2022.

 ¹³⁹ Tofts, Darren. "Century of change? Media arts then and now." *Hyperrhiz: New Media Cultures*, no. 08, 2011. doi:10.20415/hyp/008.e01

¹⁴⁰ Tofts, ibid.

¹⁴¹ Tofts, Darren. "Introduction". *Continuum: Journal of Media & Cultural Studies*, 13:2, 137. Accessed on 03.01.2023. https://doi.org/10.1080/10304319909365787.

reader/viewer aware of the fact that they are faced not with a 'final product' but with a workin-progress.

The 'quality' of being a work-in-progress may imply several 'sub-qualities'. Among them is the over-saturation of the versatility and the fluidity of the text-work/art-work and an emphasis on the techniques and mechanics that participate in their creation. One of the 'projects' of the avant-garde, according to Peter Burger, was to make art one with the 'praxis of life'. In *The Theory of Avant-Garde*, Burger writes:

In the aestheticist work of art, the disjointure of the work and the praxis of life characteristic of the status of art in bourgeois society has become the work's essential content. It is only as a consequence of this fact that the work of art becomes its own end in the full meaning of the term. In Aestheticism, the social functionlessness of art becomes manifest. The avant-gardiste artists counter such functionlessness not by an art that would have consequences within the existing society, but rather by the principle of the sublation of art in the praxis of life.¹⁴²

Such an approach, according to Burger, deprives art of its 'purpose' – "when art and the praxis of life are one, when the praxis is aesthetic and art is practical, art's purpose can no longer be discovered".¹⁴³ Rather than posing itself as a completed solid piece of 'work', the artwork serves as a 'map' of creation – the praxis within life leading to the formation of what would later be classified as 'art'. Abstract expressionist paintings would thus challenge the notion of the ephemerality of artworks (such as viewing a painting as an imitation of reality – a thing 'already-created' – an object in which only the end result is to be appreciated), abstraction makes its viewers aware of the materiality and subjective instability of an art-object. The 'materiality' here implies the awareness of the instruments of production – of the participation of the canvas, paints, brushes, the artist himself/herself as a physical body in the creation of the work of art, and of the engagement of the painting with the environment in which it is to be placed (Jackson Pollock's *Number 1A*, Robert Rauschenberg's *Pages* and *Fuses and Combines*, the collaborative *21 Etchings and Poems* project).¹⁴⁴

From being an object, the artwork becomes an 'act' – as, for instance, in action paintings wherein the canvas becomes an instrument for the "activation of space"¹⁴⁵. According to Roni Feinstein (as cited in Hellstein), "Rauschenberg's canvases become

¹⁴² Burger, Peter. *Theory of Avant-Garde*. 1st ed. Minneapolis: University of Minnesota Press, 1984, 51.

¹⁴³ Burger, 51.

¹⁴⁴ All artworks mentioned above are available for viewing in the online database of the Museum of Modern Art (<u>https://www.moma.org/</u>)

¹⁴⁵ Hellstein, Valerie. "The Cage-iness of Abstract Expressionism". American Art 1.28 (2014) 66.

"literal presences that inhabit real space and enhance the viewer's awareness of the environment in which he and the paintings coexist.""¹⁴⁶ Opening up the 'system' that lies 'beneath' the work of art not only reveals the mechanisms behind its creation but also allows a potential element of chance and randomness to interact with the method. As Valerie Hellstein points out:

... all artists manipulate materials, but action painting foregrounds that manipulation. The manipulation may make the picture look the way it does, but importantly, the process of making does not necessarily have to be visible on the surface of the work in gestural strokes. In fact, while one may understand that Pollock stood above his canvases dripping, flinging, and splashing paint across their surfaces, when one stands in front of *Number 1, 1950 (lavender Mist)*, one cannot completely disentangle the layers of turquoise patches, the peachy pink lines, and the black splatters; neither can one find an instance of redorange other than the two small spots on the far right, just above the center. In other words, although we have a general idea of the process, the step-by-step choices Pollock made are difficult to discern. Yet if the specific order of operations is almost impossible to reconstruct, one gleans that while Pollock did not allow chance into his work systematically ... he accepted the outcomes of doing so without too much imposition.¹⁴⁷

Once the system is 'opened' and the multiplicity of the elements working within it is revealed, the degree of the dominance of the artist over their work is somewhat diminished. At the same time, the artwork's level of interactivity with its viewers tends to increase. As Burger points out, "given the avant-gardist intention to do away with art as a sphere that is separate from the praxis of life, it is logical to eliminate the antithesis between producer and recipient".¹⁴⁸

Connected to this is the idea of 'subjective instability', by which one is able to understand the importance of the *artificiality* of the representation, i.e., artwork ceases to be an imitation of reality – a mimesis, and becomes, in fact, closer to ekphrasis – a rhetorical exercise of remediation, an interpretation and narration of reality in visual language – the alienation of reality from itself. In a certain way, abstract expressionist painting brings the performative power of the picture closer to that of the word – to what Murray Krieger calls the "apophatic visual image":

As the argument from analogy has it, the picture relates to the sensible as the word relates to the intelligible. The illusion permitted by the words (the illusion of an image) liberates the mind and gives it access to the intelligible, while the illusion permitted by the natural-sign image (the illusion of an object) locks it within the sensible. This is why the apophatic visual image helps belie the notion of the

¹⁴⁶ Roni Feinstein as cited in Hellstein, 64.

¹⁴⁷ Hellstein, 69-70.

¹⁴⁸ Burger, 53.

natural sign and can move beyond its limitations: playing its fictional role within a complicated code, the apophatic visual image opens out onto the semiotic possibilities of the verbal image.¹⁴⁹

Now, the interesting point here is that the notions 'revealed' by abstract expressionist paintings within avant-garde were, in fact, not so new. In a way, abstraction did not 'revolutionize' art – neither did it discover a radically new method of art creation. Rather, it instead served as a 'practical demonstration' of what was already present, even inherent, in any painting – it over-exposed and exaggerated the mechanisms that lie behind the creation of artworks in general. As has already been illustrated, hypertext does something similar to the concept of text. This idea was already present in the thinking of some of the early theorists of hypertext. Bolter, for instance, in *Writing Space: Computer, Hypertext, and the Remediation of Print*, considering the 'rivalry' that has often arisen in debates over the significance and role of printed media versus electronic media (and of printed books versus hypertexts) writes on this topic as follows:

In its rivalry with print, hypertext presents itself as an intensification, a hypermediation, of the older medium. When Nelson gave the name *hypertext* to linked digital texts, he meant something like "ne plus ultra" of text. In following hypertextual links, the reader becomes conscious of the form or medium itself and of her interaction with it.¹⁵⁰

Bolter's view, however, is rather narrow; it presents remediation as one-directional (text migrating from printed media to digital media). The avant-gardist approach to the topic is more satisfying because remediation manifests itself within experimental projects as a flow and clash of various mediums. The author of the work allows the element of the unexpected into their work as the mediums converge.

As a concluding remark, this present thesis suggests analyzing a project that can be considered as both an example of an avant-garde project and a hypertext – Tom Phillips' *A Humument: A Treated Victorian Novel.* As the story goes, the work is 'co-authored' – the 'original' source material is a Victorian novel, *A Human Document*, by a certain W.H. Mallock – a now largely forgotten work of fiction. The 'remediated' outcome is *A Humument* – a piece of art-work created *on* Mallock's work. Phillips found the book by pure chance and, recognizing its 'reusability', began to alter the text-space of *A Human Document* in a

¹⁴⁹ Krieger, Murray. *Ekphrasis: The Illusion of the Natural Sign*. Baltimore: The Johns Hopkins University Press, 1992, 138-139.

¹⁵⁰ Bolter, Jay David. *Writing Space: Computers, Hypertext, and the Remediation of Print*. Mahwah: Lawrence Erlbaum Associates, 2001, 44-46.

particular way – as Courtney A. Pfahl describes it, "as a reader via visual intervention"¹⁵¹. With this intervention, Phillips, the visual artist, interrupts the text by making it a part of an abstraction, a collage, a pastiche of various cut-outs/sources. He also imposes certain 'rules' on the text itself, establishing, for instance, the recurrence of the main characters – Irma, who is also a character in Mallock's work, and Toge, who, according to Phillips' commentary to the final edition published in 2016, is bound to appear in the narrative whenever the words 'together' and 'altogether' occur. Another 'rule' is making the arts 'connect' – disrupting the text with imagery, and at times, with other, 'alien' text(s).

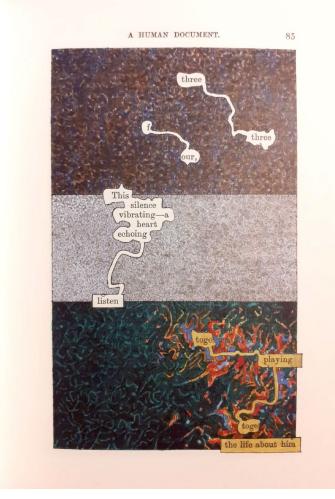


Image 5. 152

¹⁵¹ Pfahl, Courtney A. ""AFTER THE / UNAUTHOR": FRAGMENTED AUTHOR FUNCTIONS IN TOM PHILLIPS'S "A HUMUMENT"". *Studies in the Novel* 3.47 (2015), 111.

¹⁵² Phillips, Tom. *A Humument: A Treated Victorian Novel*. 6 ed. Thames & Hudson, 2017, 85. Scan made by the author of the thesis.

A Humument 'remediates' both time and space. The space of *A Humument* is, as James L. Maynard points out, "heterogeneous"¹⁵³ – it functions both as an image-space and a text-space. The idea of a 'tabula rasa' is taken to a new level. If previously, text was to populate an empty page, in Phillips' work, text serves as a 'blank page', a 'background' on which other things can be 'superimposed'. The difference, however, is that the text carries its own weight, and, instead of fading into the background, it gives the work an additional 'depth'. The visual cut-outs form a 'frame' for the text-pieces to 'pop-up' from the depth of the original 'material' of which they were a part. The effect of this is groundbreaking. As Maynard states:

As analogous experiences, both the verbal and the visual display an ongoing tension between surface and depth. Textually, the clusters of words oscillate between instance of semantic depth and referential flatness and likewise reply on both metaphor and metonymy, depth and surface. ... Similarly, the visual presentations display their own alternation between the projection of a perspectival depth and an emphasis on the page as a flat surface. The gesture towards depth privileges a unified perspective, determinacy, and the signified idea or concept over transparency of the signifier, whereas the gesture towards flatness foregrounds a lack of unified perspective, the play of flux and surfaces, contingency, and the (oftentimes opaque) materiality of the signifier.¹⁵⁴

Apart from spatial remediation, Phillips' project also remediates time. On the literary level, it is done by 'revealing' the text. As *A Humument* progresses, the voices of 'modernism' are reverse-echoed in a work dating back to 1892 – the voices of Samuel Beckett and James Joyce. It goes, however, further than that, when, as Phillips mentions in his commentary, he, "in 2011 ... found on p9 both 'app' and 'facebook', which would have had no meaning at all even ten years ago."¹⁵⁵ This, in a way, is a perfect description of a 'work in progresse' – not simply a work that carries the status of being 'unfinished' but also the one that 'progresses' along with the timeframe of its creation, existence, and re-creation.

The alteration of *A Humument* started in 1966 and, considering the fact that the Final Edition was published in 2016, one can imagine that not only the textual and visual references but also the technology that made remediation possible progressed chronologically. Bits and pieces of different versions of *A Humument* traveled around the globe and were presented in different forms over the span of decades – as a part of the

¹⁵³ Maynard, James L. "I Find / I Found Myself / and / Nothing / More than That: Textuality, Visuality, and the Production of Subjectivity in Tom Phillips' "A Humument"". *The Journal of the Midwest Modern Language Association* 1.36 (2003), 87.

¹⁵⁴ Maynard, 86.

¹⁵⁵ Phillips, from Notes on *A Humument*. *A Humument*: *A Treated Victorian Novel*. 6 ed. Thames & Hudson, 2017.

exhibition, as an engraving on a scull, in a printed version, in an electronic version, and even as a tablet app. This non-dependency on, and the ability to adjust to, the medium emphasizes the elements of randomness, flexibility, and non-linearity that the work represents. Phillips himself saw his project as a "dispersed narrative … more like a pack of cards than a continuous tale".¹⁵⁶ Readers are invited to be alert to this fact and are made aware of the specificities of the medium and of the mechanics used in each of the particular instances, for even though the work might be stretched through time and space, it is still bound to match the requirements of a particular technological framework (be it the medium of print, electronic media or physical artwork/installations), which often remains visible to the reader. As Maynard writes:

This tension between fixity and flux – between the frame and what attempts to break out of it – effectively moves the reader's eye in varying directions across the page. However, if certain shapes or patterns do transgress a given border, it is usually just to move into a different frame, and thus a reader is almost always conscious of being in one.¹⁵⁷

And indeed, even the Final Edition, which has been the primary version considered in this chapter, raises this awareness by placing the treated art-work in the center of the page and creating a frame of blank space around it. On some of the pages, visuals and text interfere with the blank space, yet they never come to dominate it, (i.e., the treated novel does not extend itself to the margins of the printed page), but always stays within its borders. This typographical choice emphasizes the fact that what is presented to the readers is not the 'original' version (not even the original version of Phillips' treated version of Mollock's novel), but a reproduced copy. Readers are thus made aware of the 'artificiality' that stands behind the seemingly familiar and 'natural' organization of the text on the page. In electronic environments, this artificiality flourishes (as an app, *A Humument* reaches the apogee of its randomness and fragmentation). What is revealed and emphasized is the endless potential for referentiality, linking, and overwriting (both in visual and textual languages) that any text possesses.

What is left to consider is the second, 'ironic' level of the abstract art/hypertext proposition mentioned alongside the practical level. It relates to the similar 'fate' that hypertext and avant-garde art had to face. If originally, both hypertext and avant-garde art had the connotations of being 'revolutionary' and experimental, these notions have been

¹⁵⁶ Phillips, ibid.

¹⁵⁷ Maynard, 85-86.

gradually dissolved in the process of embedding the 'experimental' into the 'popular,' as a result of which the possibility of, and the hope for, 'true revolution' has been lost or abandoned. Historical 'avant-garde' became integrated into two systems – on the one hand, it was absorbed by the 'world of art', becoming one of the genres/historical movements within it; on the other, its ideas and philosophy, in their more 'primitive', even brutalist way, became prominent in advertising (pop-art). As Burger remarks:

The provocation depends on what it turns against; here, it is the idea that the individual is the subject of artistic creation. Once the signed bottle drier has been accepted as an object that deserves a place in a museum, the provocation no longer provokes; it turns into its opposite.¹⁵⁸

At first glance, the story of hypertext is undergoing a somewhat similar path. A more or less established canon of electronic hypertext fiction 'classics' already exists. At the same time, hypertext has been 'popularized' – it is a basis for the operation of the Web. However, the fact that hypertext represents not only a specific ideology or a tool, but an approach to, and an environment for, writing and is, at the same time, swayed by the development of technology, one may claim that its future is 'brighter' as it allows space for more creative projects (the cyber neo-avant-garde) to come up. Hypertext is so strongly embedded in the mundanity of everyday systems that it would be much more difficult to discard it or to proclaim it dead.

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¹⁵⁸ Burger, 52.

6. Concluding remarks

The labyrinth is made so that whoever enters it will stray and get lost. But the labyrinth also poses the visitor a challenge: that he reconstructs the plan of it and dissolve its power. If he succeeds, he will have destroyed the labyrinth; for one who has passed through it, no labyrinth exists. ¹⁵⁹ Potent with possibility, in the early 1990s virtual space was c/sited as transcendent and utopic, offering 'new contexts for knowing/talking/signing fucking/bodies' Like many before them – saints, witches, phone sex workers, writers and coders, VNS Matrix invoked the power of the word to both inhabit and extend their physical bounds into ethereal mind space. With essence condensed to text and introjected as binary code into the machine they set forth to play with, the interrogate and to activate other coded bits and bytes.¹⁶⁰

This present thesis has attempted to sketch an overview of the state and event of hypertext and to introduce it as a complex, hybrid concept that can be used as a tool for critical analysis. One of its drawbacks, which must have become apparent quite early on, is that it relies heavily on theory and does not tackle the issues of hypertext in a particularly 'practical' manner. Even though this thesis includes the analysis of hypertexts, no deeper insight into the technological framework is given, and the thesis feeds more into the discourse/theory rather that the practice of hypertext. For a fuller understanding of the concept of hypertext, especially in electronic environments, an in-depth knowledge of computer architecture as well as coding/programming would be beneficial.

This thesis, however, attempts to use hypertext predominantly as a framework to reflect on literature and art, and as such, therefore allows itself to skip the 'hard machinery' behind hypertext (though it should not be forgotten). At the same time, one may contest the statement that no hypertext has been created as a result of the present work, for if one is to use the classical definition of hypertext as non-sequential writing, this thesis is precisely that – it features fragmented information, footnotes, cross-referencing, and linking. It was created in a fully electronic format with numerous resources that were accessed digitally. Thus, one may claim, that this thesis – and indeed any contemporary thesis – is a hypertext of its own.

¹⁵⁹ Hans Magnus Enzensberger as cited in Calvino, Italo. "Cybernetics and Ghosts". *The Uses of Literature*. San Diego, New York, London: Brace & Company, 1986, 23.

¹⁶⁰ Rackham, Melinda. "@go #91010". *VNS Matrix/Merchants of Slime* (2018). Accessed on 18 Dec. 2022. https://vnsmatrix.net/essays/go-91010.

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