

# German Digital Literature: An Introduction

By Roberto Simanowski

No. 9 – 27.02.2000

## Abstract

This article is the expanded version of a talk given at Harvard University, at MIT and at Goethe-Institut Boston in February and March 2000. The aim of the talk was to introduce digital literature, to present German examples of certain types of digital literature, and to discuss how these pieces exploit the technology of the medium to tell a story.

## 1. Preface

If one want to talk about literature meeting the web, one would be well-advised to start with literature which misses the web. That does not mean talking about books. It means starting with literature which is on the web, not for aesthetic reasons, but rather to bypass the challenge of evaluation by a publisher. What one mostly see on the net are stories, poems, even novels written in the traditional way. The only difference is that those pieces are presented in digital form and not between the covers of a book or in a printed magazine. The aim behind this is to distribute literature without facing the restrictions of the book trade. The disadvantage of doing so is distributing literature without the pleasure of the book trade, that is, getting some money out of your work.

Now, I do not object to the idea of avoiding the constraints of the traditional book trade, its rules, or, to echo Michel Foucault, the "police of discourse". Considering that the press is owned and ruled by a very few people and that the book trade first of all follows the taste and demand of the consumers, that is, considering the actual circumstances of cultural production, I have great sympathy for every attempt to break out. However, this is a different story, and one title of a lecture covering it might be: "The Press Monopoly and the Drudge-Report: When David Meets Goliath on the Web".


Such a lecture would take a more social approach to literature on the web. I intend instead to talk about a revolution that is taking place in the realm of aesthetics. The focus here will be on literature that addresses many assumptions that traditional literature, be it on the web or on paper, takes for granted. Some of these assumptions are:

- Literature consists of words and nothing but words.
- Literature is something supplied by an author to readers.
- The reading process lies in the hands of the reader.
- A story can be set up in a nonsequential way but is still to be read in a certain order indicated mainly by numbers at the bottom of the page.
- Words can move one and are often meant to do so but are not themselves supposed to move through the text.

The literature I am going to talk about is different. Our first example comes from the opening of a German piece that has the strange title "Time for the bomb" by Susanne Berkenheger which won a German competition for internet literature in 1997.

The opening of this piece consists only of words, set up in a linear way. Nevertheless, the difference to printed literature is obvious. Some words are marked by color and, more importantly, the lines appear in a predetermined way, speeding up our reading so that we arrive in the text as breathless as the young woman in the text arrives in the train station from Moscow (see [review](#) in [dichtung-digital](#)).

Another piece by the same author is entitled "Help". This work also consists only of words and the opening again speeds up our reading. Here words are programmed to appear in different windows representing different characters. The opening again sets up the speed of reading, this time it comes as a sort of dialog between the narrator and the character. Java windows represent the passengers, who are about to fling Jo out of the plane. Jo then finds himself among four persons who all have their own hope regarding this new kind of fellow fallen from heaven. The Java windows give the person's comment, the connected text on the screen presents her inner thoughts. The story proceeds as a loop, Jo is in the plane again, the passengers fling Jo again, however, in this loop Jo's gender does change which turns the love-tables among the five characters too. This example gives an idea how text can be set up as sort of a stage-performance.

A third example totally different from these two is  "Mass Transit," a story about seven people travelling through Manhattan on a warm Saturday evening in June. Clicking on the splashpage, we see a Preface. As is normal with such uncommon phenomena we are told how to deal with it. We learn different ways to navigate the text. First of all, we may look up the characters' introduction to learn who is in the play and where she is going.



### Profile


Delphine Jones, a 12 year old girl from Washington Heights. Today she's being taken by her older cousin [Rita](#) to have lunch at Windows on the World atop the World trade center. The restaurant has a dress code, so she has to wear something appropriate. She has a 24 hour stomach flu.




Clicking on Delphine we get a introduction of Delphine, if we want to know more about her cousin we are brought to her introduction where, of course, a link to Delphine is provided as well. Then we have to decide how to navigate through the story. The alternatives are navigation by location, time or person.

Delphine 10-11am	Rita 10-11am	Bruce 10-11am	Danny 10-11am	Charlie 10-11am	
Delphine 11-noon		Bruce 11-noon		Charlie 11-noon	Jason 11-noon
Delphine 12-1pm	Rita 12-1pm	Bruce 12-1pm	Danny 12-1pm		
Delphine 1-2pm	Rita 1-2pm	Bruce 1-2pm	Danny 1-2pm	Charlie 1-2pm	Jason 1-2pm
	Rita 2-3pm	Bruce 2-3pm	Danny 2-3pm	Charlie 2-3pm	Jason 2-3pm
Delphine 3-4pm	Rita 3-4pm	Bruce 3-4pm	Danny 3-4pm	Charlie 3-4pm	Jason 3-4pm
Delphine 4-5pm	Rita 4-5pm	Bruce 4-5pm		Charlie 4-5pm	Jason 4-5pm
Delphine 5-6pm	Rita 5-6pm	Bruce 5-6pm	Danny 5-6pm	Charlie 5-6pm	
Delphine 6-7pm	Rita 6-7pm	Bruce 6-7pm	Danny 6-7pm	Charlie 6-7pm	Jason 6-7pm

The Clock brings up a chart on which we can point to a given person at a given time. Jason at 4-5 p.m. brings up the following piece of the story.



"Yes officer. No one's hurt. Just a little fender damage to both cars. Here's the paperwork. I do apologize for this mess. I certainly was the one at fault. That kid driving the limo had nothing to do with it. I don't know exactly what happened. It was getting so dark. I thought there was something wrong with my eyes. I know it sounds crazy but, for a moment there I thought I was going blind! Yes officer. What's that? Eclipse? You mean to tell me that there's an eclipse going on here today? Oh thank god! Oh, I know I've still got a problem on my hands here officer, but I'm just thrilled to not be going blind on top of all that! The passengers are all still in the bus. All except one. I had to let her go see her sick grandmother. Heart trouble. That's right. That's what she said."



The busdriver just caused an accident. If we want to know how the "kid" saw the incident we may click on the hotword; if we would rather know who left the bus, we may click on the appropriate word. The map on the left side is not as empty as it was in the beginning. Now, at the end of the story, all the character's paths come together. If we want to change position or perspective we can do it in the map by clicking on any of the colored circles.

However one may judge the quality of this hyperfiction on the basis of those texts, this example -created by Freedom Baird within an Electronic Writing Seminar at MIT in 1996- is meant to explain how a story can be set up in digital shape. The point of this hyperfiction is to keep perspectives separate and to provide links between them. Thus, one can switch from one character to another and learn what he is thinking about the person he is just meeting. This is not anything that a writer wouldn't have provided in his text anyway. However, here the reader has to decide what he is interested in right now, whether she wants to follow this or this link. The effect is that one perceives the story more as a puzzle than as a coherent whole, and thus might become more aware of the coincidental links which life consists of. We know this concept of life as a puzzle from Robert Altmann's movie "Short Cuts" or from John Roderigo Dos Passos' novel "Manhattan Transfer", which might be alluded to in this hyperfiction's title and location. We have seen from this example how the alternative link structure of the web serves this concept in terms of storytelling. We also have seen how images can be included as illustrations of the

character, as representation of space, that is to say, of time in space, and as a navigation map.

These examples give us an idea of how the literature under discussion differs from what we normally find in books. In contrast to the aspects of traditional literature mentioned above, this literature is marked by one or more of the following features:

- The narrative employs words as well as images, sound and movies.
- The text is written partly by the reader, and sometimes the reader not only plays the role of the author but of the character as well.
- The reading process is partly determined by the author.
- The story is presented in a non-linear way; its composition is in the hands of the reader themselves.

All these features exist only on the web and through the web. One can not print it out, or produce it outside the digital media.

The listed characteristics raise some serious questions, such as: What is the meaning of an image that literally moves through the text? How does one read a word that fades out or makes noise? What is the purpose behind multilinear narration? And if, for instance, the length of time a given file can remain on the screen is determined ahead of time by the author, what implications does this have for the reading process? More generally, we may pin down the following questions:

- What new aesthetic possibilities and temptations does this multimedia-storytelling bring with it?
- How does this storytelling reshape the traditional author-text-reader paradigm?
- To what extent can one still speak of it as Literature?

## **2. Definition and Typology**

I pointed out that the listed features are only possible on the web and I will use this use of the web as a basis for my definition of digital literature. The main criterion for this literature is the need for digitalization in order to realize such features as intermediality, interactivity and nonlinearity. In saying this I make two distinctions.

1. Traditional literature on the web does not belong to this group since it can be printed without losing any of its features. Being digital is not evidence

enough, the digital existence has to serve more than just the purpose of distribution on the web.

2. The main reference point is not the web but digital shape. We talk rather about digital literature than literature on the web. Thus we include examples that exist on digital media other than the web, like diskette or CD-ROM. Actually, this distinction is appropriate since the literature under discussion started long before the web. And it is still distributed on diskettes or CD-ROMs, partly for economic reasons and partly because of the web's constraints on the speed of data transfer. The slowness of the web still decreases the enjoyment of working with sound and movie files or other byte-intensive applications.

On the other hand, one could say that collaborative writing only makes sense on the web. However, in spite of, or rather because of this objection one should use the term digital literature instead of literature on the web for the former is the broader term and includes the web equally, which can not be said for the latter. Collaboration as a genuine feature on the web is just one type of digital literature. Using the web as an umbrella term would focus only on this particular feature and therefore narrow our perspective.

I should add one comment about the terminology. I am using the term digital literature saying at the same time that this literature does not only consist of words. Since words are allied with images, sound and even movies, it may be asked why I still refer to it as literature, and why I do not say digital art. There are two answers. One refers to tradition, and one to proportionality.

1. The phenomenon we are dealing with began when computers were not yet grown up enough to present images and sound. The first well-known example of digital literature, Michael Joyce's hypertext novel "Afternoon. A Story", appeared in 1987. It was distributed by Eastgast Systems on diskette and consisted only of words. Concerning this example and also the later but equally well-known hypertext novel "Victory Garden" by Stuart Moulthrop (1991), it was pretty plausible to apply the term hyperfiction. This term refers to hypertext, as a certain technology of text presentation, and to fiction. The term hypertext or hyperfiction is still in use, though with a broader sense of the term 'text' that now includes the language of images, sound and movies as well. I use the term literature in this broader sense as the term text is used above. However, I am not using the terms hypertext or hyperfiction as an umbrella term, since those are misleading for their reference to multilinearity as the supposed main feature. We will see that many examples of digital literature are not multilinear at all.

2. Another reason to keep the term literature is that the examples we are dealing with mainly employ words. The proportion of words in relation to graphics and sound devices still distinguish it from the audio-visual media. This will change with

the development of better hardware and software that is already causing a multimedialization of the web. We might then look for another term such as narrative. In German we might go back to the term Kunst in the way it was understood in the 18th century before its differentiation into 'art' such as plastic forms or painting, on the one hand, and 'literature,' on the other hand. Today in German the term Kunst would, for its exclusion of literature, be as equally misleading as Literatur is.

For these reasons I suggest using the term literature but to take it less literally than normal. I would also suggest thinking the same way about the term >text< as it appears in this talk.

Having clarified what belongs to digital literature and what does not, we still face a chaos of phenomena that needs to be put in order. This goal itself is questionable, not as much for the web's traditional commitment to anarchy, as for the mixture of features we encounter in actual examples. However, it may be helpful to describe some general types of digital literature that furnish us with a base from which we can set out to de-differentiate it again should this prove necessary.

I discern the following general types of digital literature - the third column marks the key feature of each type. The notes in parentheses show optional features:


<b>Collaborative Writings</b>	Text that requires digital existence on the web for production reasons.	Multiple Authorship Interactivity (mono- or multimedial) (linear or multilinear)
<b>Hypertext, Hyperfiction</b>	Multilinear text that provides the reader different ways to navigate through the work.	Multilinearity (mono- or multimedial)
<b>Hypermedia</b>	Alliance of words, images, sound and movies.	Intermediality (linear or multilinear)


These three<sup>1</sup> general types I will now exemplify.

### 3. Collaborative Writing

Collaborative writing projects are marked by collective authorship. Such authorship can happen in different ways. I want to point out three types:

- Several authors write one (linear) story step by step.
- Several authors contribute to different branches of a (multilinear) story.
- Several authors deliver independent contributions to an assemblage of texts.

An example of the first is the German piece  "[Beim Bäcker](#)" (see review in [dichtung-digital](#)). Carola Heine started this project in 1996 when she wrote about a woman who encounters three preschool girls in a bakery longing for lollipops but missing a quarter. The woman is touched by these lovely girls, gives them the quarter, suddenly wishes for a baby, feels the need for a man and develops a sexual fantasy towards a worker having coffee in the background. Instead of talking to this man the woman buys herself a lollipop and leaves the bakery. And so the author leaves the text, leaving it to the next author to carry the story forward.

An example of the second group is  "[Die Säulen von Llacaan](#)". This project -initiated by Roger Nelke in November 1997, consisting of 160 contribution on July 19, 1999 - is set up as a hypertext. The author can continue the text wherever she wants and she can decide to which other part of the hypertext her contribution shall be linked. Thus one can rearrange a scene by a new suggestion or create new connections between scenes and characters within the story. It is based on an introduction about the people from Llacaan, which sketches the magicians, scientists, warriors, unitarians, strangers and simple people who live in Llacaan. In addition, there is an introduction about the universe of Llacaan which informs us about a conspiracy attempting to abolish the division of Llacaan's society into three pillars: science, magic and power. The introduction also states that individuals from the past, present and future of other universes enter Llacaan through one of its portals. This set-up might remind one of MUDs or the "X-Files". An idea of how to read this work is given by the following slide, which illustrates one of the story's main storylines. This type of writing project allows itself two sorts of multiplicity: multiple authorship and multiple answers to one question. One can imagine how coherent a work like this would be.

An example of the assemblage of independent texts is "23:40" or: "11:40 pm" - initiated by Guido Grigat in October 1997 (see review in [dichtung-digital](#)). This work's backbone is the 1,440 minutes of a day. Every minute is to be filled with a text that should somehow apply to this minute, either describing something that happened in this minute or describing something remembered in just this minute. The text can only be as long as what can be read within a minute, since after 60 seconds the current text automatically gives way to the next. Every text has its minute and every minute has its time.

This setup marries written communication with the features of oral communication. If spoken language frees our knowledge of an event from time and place, written



language frees us from having to be present at the time and place this event is reported. However, in 23:40 we are tied to a certain time again: the reporter appears during his minute, if we are late we will miss the story. A consequence of this setting is, for instance, that a description of a sunset can only be read in the evening or, for whatever reasons, only in the morning.

Another consequence is the following: At 9:18 a.m. a person describes downloading and reading her emails. This is one of the most common sorts of texts in 23:40: just to describe what one happens to be doing. The person then faces the message that her best friend from school has died. The next minute consists only of one sentence from the same writer, which translates: Real life sucks. The point behind this rather slangy phrase is that this is all we can read in minute 9:19. That means the reader has to wait almost 60 seconds for the next text. And this means the author has her readers observe a minute's silence for her dead friend.

These are three examples of collaborative writing projects with different text settings. In every case, the project lives on in the transformation of readers into authors. Every reader is invited to continue the story or to contribute to the assemblage of texts. This normally happens by sending the contribution to the project leader who might evaluate, modify or reject the offered text and who then posts it on the web. The project leader, moderator, or administrator therefore is responsible for the quality of the whole. However, collaborative writing projects normally work without intervention of the administrator's power due to the web's ideal of free interaction without restriction by any "police of discourse" as happens enough in the world outside the web. Needless to say, collaborative writing is only as good as its weakest contribution. That does not mean that there are no valuable examples of collaborative writings. However, I intend to draw your attention from the focus on results to the focus on the process. Collaborative writings are most interesting regarding the fact of collaboration.

The first project "Beim Bäcker" is a very good example of this. What we can witness here is a fight for and with words. After the first author has introduced the female main character another writer, a man, fills in some gaps. He turns the character in a direction the first author does not agree with at all. Now this author tries to rescue her figure and to abuse the character the male author created. However, she can not just erase the former contribution, she has to take into account what has been said so far. This situation makes her both angry and inventive. It is interesting to see how she uses the information in the other author's contribution to get a different result, and how she implies some common prejudices about the male sex to get at her opponent.

It gets even more interesting when other readers turn into authors and jump in. Soon we can find all kinds of characters, not as much within the text as among the authors. There is the clumsy one, who does not really know how to pull it off. There

is the obsessed one, who tends to find sexual connotations in everything. There is the inhibited one, who does not know how to deal with this. There is the politically correct one, who brings up racism and argues for solidarity. There is the social one, who complains about the mess and calls for more cooperation and there is the genius, who easily brings all the threads together again. In the end, we also realize that a new author hardly takes into account the legacy left by his predecessors. If they set up a meeting between two characters, if they close a contribution with an unexplained incident, the incident will not be solved or the characters will not meet if the author who opened this track does not bring it to completion. Thus it turns out that collaborative writing projects are actually playgrounds for self-centered people, except for a few who suffer because of this and nevertheless demand cooperation.

The joy of a collaborative writing project therefore is not as much the story itself as what the text gives away about its authors. There is a text beyond the text in which the authors are the characters. The real story, we may say, is the dynamic between the authors. The enterprise of collaborative writing is communication itself. Because of this the aesthetics of collaborative writing should be considered 'social aesthetics'.


## 4. Hyperfiction

The oldest type of digital literature is hypertext. This technology presents chunks of text in a multilinear way. We know the advantage of this concept from printed dictionaries and we are mostly familiar with its use in the digital realm from the internet, which itself could be called a hyper-hypertext. Using hypertext for aesthetic purposes means first of all exploiting its alternative form of navigation. We saw what this looks like when I was introducing "Mass Transit". In earlier hypertext, of course, there were no images.

But no matter whether there are images or not, the main objection against hyperfiction is exactly this alternative form of navigation. There is no definite way to read through it. There are several links and it is up to the reader how to assemble the story. In this light, hyperfiction reminds us of a cook who drops the ingredients onto our table instead of devising a well-planned meal using his grandmother's famous recipe. We may ask ourselves why we should even go to the restaurant in the first place if everything is such a mess. Laura Miller, Senior Editor of the online magazine "Salon", formulates these concerns in the following way: "Hypertext is sometimes said to mimic real life, with its myriad opportunities and surprising outcomes, but I already have a life, thank you very much, and it is hard enough putting that in order without the chore of organizing someone else's novel." (March 15, 1998 in [New York Times](https://www.nytimes.com/1998/03/15/arts/15BOOKEND.html): "BOOKEND:www.claptrap.com")

Whereas Miller insinuates that hyperfiction authors are simply too lazy to finish their job, the authors themselves claim to free readers and to fulfill values of postmodern philosophy by staying away from imposing a certain order on the reader. In 1992, Robert Coover, who as a writer knows quite well how to organize novels, published a famous article about hyperfiction in the New York Times Book Review with the provoking title "The End of Books". In this article he writes with an ironic smile that the traditional novel "is perceived by its would-be executioners as the virulent carrier of the patriarchal, colonial, canonical, proprietary, hierarchical and authoritarian values of a past that is no longer with us." (New York Times Book Review, June 21, 1992: 1, 11, pp. 24-25)

Coover continues, this time more seriously: "hypertext presents a radically divergent technology, interactive and polyvocal, favoring a plurality of discourses over definitive utterance and freeing the reader from domination by the author." Despite these honorable aims to free readers from domination, Coover is forced to admit that the writing students in his Electronic Writing Seminars "are notoriously conservative creatures. They write stubbornly and hopefully within the tradition of what they have read. Getting them to try out alternative or innovative forms is harder than talking them into chastity as a life style."

If the disposition towards chastity has decreased since then, the sensibility for hyperfiction has hardly grown at all. Eight years later, Coover has announced that the golden age of hypertext is over. With respect to literary hypertext we find ourselves in the silver age that is "characterized by a retreat from radical visions and a return to major elements of the preceding tradition (while retaining a fascination with surface elements of the golden age innovations)." (Literary Hypertext: The Passing of the Golden Age, in:  FEED February 10, 2000)

According to Coover, one reason may be that the Web, which arrived "almost overnight", "has not been very hospitable" in terms of serious hyperfiction but has rather supported superficial, opportunistic events. "It tends to be a noisy, restless, opportunistic, superficial, e-commerce-driven, chaotic realm, dominated by hacks, pitchmen, and pretenders, in which the quiet voice of literature cannot easily be heard or, if heard by chance, attended to for more than a moment or two. Literature is meditative and the Net is riven by ceaseless hype and chatter. Literature has a shape, and the Net is shapeless."


Another reason could be the fact that hyperfiction does not really provide the most important feature of narratives: suspense. Because of its setup, hyperfiction does not force its audience to read from a certain beginning through to a certain end. Hyperfiction lacks the "nextness" of traditional stories. Therefore some people consider non-linear narratives to be like a radio without sound. (see Steven Johnsen, February 11, 2000, in FEED Loop to Coover's Essay)

These factors make it difficult to establish tension which could then be released at the finish. Hyperfiction cheats us out of our happy ending. This does not refer to the Hollywood-style happy ending but the happiness which comes with any ending. The end shows us whether our assumptions were right; the end answers all raised questions. Closure is a release.<sup>2</sup>

On the contrary, Michael Joyce, the author of the 'granddaddy' hyperfiction *Afternoon*, writes in this hyperfiction: "Closure is, as in any fiction, a suspect quality, although here it is made manifest. When the story no longer progresses, or when it cycles, or when you tire of the paths, the experience of reading it ends."<sup>3</sup> The end of the reading process from this perspective, which holds true for a lot of other hyperfictions, is not the result of closure and release but of exhaustion.

A reply to this objection might be that reading hyperfiction is itself a sleuthing enterprise, since we do not know where we are in the text or where we are going. This indeed might be the case from time to time, however, one condition would then be that all feasible paths through the text are carefully controlled by the author. I do not want to get deeper into the question to what extent this is even possible. Considering the fact that the alternatives grow exponentially, one has to doubt it. Smaller hyperfictions, on the other hand, of the type which are common today, may provide this opportunity.

In any event, this calls for a powerful author rather than for the death of the author, as it was announced in the early days. Today, this necessity is widely acknowledged by authors and theorists of hyperfiction. To come back to our lazy cook: Hyperfiction is *not*, or rather *should* not be, a bunch of miscellaneous pages. All ingredients should be set up in a well-considered way and links should not be just connecting paragraphs that could also have been written in a row. Links should transfer a specific meaning.

How it could work to transfer a specific meaning by a link is shown by a passage in Moulthrop's  "[Hegirascope](#)". This hyperfiction consists of several nodes containing four links, which are not found within the text as bold or underlined hotwords but in the margin. Node 047 starts with the words "This is the dream of remote control. In this dream you can press a button whenever you like and totally reconceive the world around you. Click, you are two hundred feet tall looking down on sleeping suburbia [...]" Having read approximately to this line, the node disappears, turns into a black screen with a single word in the middle - 'click'. This seems to be the practice of remote control and of course, this is a false link. Nothing happens. One has to go backwards in order to finish reading the dream. One must hurry in doing this, since the screen changes again and again. So not only does the reader not get the promised feeling of remote controls, but rather he feels as though he himself is being controlled remotely.

This is a good example of how the setting up of a link conveys a message which complements, or more exactly, modifies the meaning of the letters. The irony of the promise of remote control lies totally in the linkage. The link is a deconstruction of the text. However, there is even more. There is a deconstruction of the deconstruction. Browsing the black screen, the reader will encounter many hidden links, twice as many as are provided on regular nodes. The occurrence of these links modifies the meaning once more by saying: you will not find remote control if you just click on where it is promised, you have to be skeptical, you have to look around.

Another example is not realized, but imagined by Janet H. Murray in her book "Hamlet on the Holodeck" (1997, p. 176f.). Murray is picturing "an electronic portrait of Rob's mind on the night of his suicide": "Thoughts of going for help could be represented by false links [...] Perhaps the navigating reader would feel impelled to return to a good memory or to trace it more deeply but would find those associations closed off, blocked by unpleasant thoughts, or too difficult to hold on to." Loops could lead to "a single act of perception that becomes lodged in the mind, like a roadblock on the path to hopefulness." The contradiction between the hypertext structure of alternatives and the alternativelessness of the witnessed thoughts would intensify the readers feeling of hopelessness and thus of what suicide is all about.

One of hyperfiction's most acclaimed features is interactivity, since the reader does not passively read but has to choose her way through the story. This claim is rejected by others concerned by the doubtful nature of this superficial click-interactivity, who stress a deeper sense of interactivity: the emotional and mental involvement of the reader. Richard Merwin notes: "If the reader or viewer isn't necessarily clicking on a hypertext link, isn't the well-crafted story still engaging a far more profound part of its reading or viewing audience? Isn't it engaging, inviting or demanding emotional and mental participation?"

This objection should be remembered in the face of accusations that linear text is merely passive consumption. Interactivity, as well as intertextuality, are sometimes naively claimed as genuine features only of hypertext and are on the other hand ignored as features of traditional text. Hypertext does not necessarily increase intertextuality. It brings it up to the surface as something mechanical. However, the link as an obvious representation of intertextuality, is no less patriarchal than linear text is accused of being. One could even argue that in hypertext, the author dominates the realm of association by marking intertextuality by mechanical links. The same holds true for interactivity. However, interactivity in digital literature can have some remarkable effects as is shown by the next example.

In the earlier mentioned hypertext *Zeit für die Bombe* a situation arises in which the character Iwan opens a suitcase and discovers something that looks like a bomb. He is tempted to press the red button. The next sentence turns his temptation into

ours: Don't we all want to press or turn something? The encouragement "Iwan, just do it" is set up as a link and is thus actually addressed to the reader. If one clicks a sentence appears saying that Iwan clicked and the time remaining until the explosion is shown. The time pops up for just a moment, since Iwan closes the suitcase immediately. At the end of this hypertext the bomb kills Iwan.

The meaning behind this setup is obvious: The reader kills the story's character. The sentence "Iwan clicked" makes sure that we do not identify ourselves with Iwan. The reader is, by her click action, drawn into the story, not as victim but as perpetrator. This is a shift in the psychological function of the reading process that Lucretius pointed out 2000 years ago in the second book of "On the Nature of Things" (Line 1-4 in book two):

How sweet, to watch from the shore the wind-whipped ocean  
Toss someone else's ship in mighty struggle;  
Not that the man's distress is cause for mirth -  
Your freedom from those troubles is what's sweet.

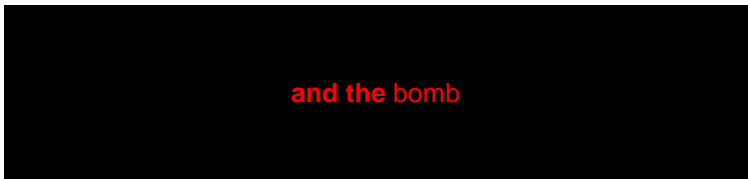
Now, within digital literature, the reader not only delights in watching other peoples' disaster but also causes it, or at least she does not avoid it even though she could have, by refusing the offered link. The aim of this passage is to provide a metareflection on the media and its idea of remote action without consequences.

There is an allusion to the shipwreck with audience constellation within the text itself, when Iwan complains that the reader enjoys his disaster in cold Moscow from her own warm room. Iwan then threatens the reader with a hand grenade. Unfortunately, the author fails to bring the grenade to the reader. This would have been the other part of interaction: the punishment for what one does on the computer. The author could have programmed something which would happen after the reader has clicked on the link that triggers the bomb. Imagine a confusion on the screen like a simple fade out function or a false virus message followed by a system crash that forces the reader to restart her computer. This would have been an honorable task for hackers; one could call it crime for art's sake.

This example raises some other questions about digital literature. The sentence "Und die Bombe tickte" (And the bomb ticked) shows that the digital word can not only express but also act.

**and the bomb ticked**

In this case, it does both, like in a play where the stage directions are read out loud during the performance. We may consider it a version of "kinetic poetry" as known from [Robert Kendall's works](#), where the graphical choreography of text coordinates meaning and movement. "The words themselves, as they move and change on screen, become like actors in a theater piece." However, with respect to theater, we also may consider our example redundant, since actors normally do not say that they are angry or depressed but express it. It does not need to be said, as it is already performed. Therefore, a consequence of the animation seems to be omitting the verb and writing just: "And the bomb" with a blinking 'bomb'.



We realize that here the text turns into a sort of double medium, a 'visualisation without pictures'. The next step would be to substitute the word 'bomb' by a blinking picture of a bomb. A further step would be to employ a sound file and have the picture of the bomb ticking. If we consider this to be too much visualisation, as a reduction of the word's signification process to its surface spectacle, we also may object to the presence of the blinking word as evidence of this process.

A special piece of hyperfiction is ["Die Aaleskorte der Ölig"](#) (Oily's Eel Escort) by Dirk Günter and Frank Klötken, prizewinner of the German competition for internet literature 1998 (see review in *dichtung-digital*). In this piece are no hotwords on the page linking to one another at all. Nevertheless, there are 6.9 billion ways to navigate the text. The reason for this is that the story consists of twenty scenes most of which can be told by every of its five involved parties. Combining each scene from each perspective with each scene from every other perspective adds up to 6.9 billion. This amount of alternatives is reminiscent of Raymond Queneau's book "Cent mille milliards de poèmes" (1961), one of the precursors of hypertext in print that offers ten sonnets printed on ten thick sheets in such a way that each line of each sonnet can be combined with each line of another.

"Die Aaleskorte der Ölig" opens like a movie and pretends to be a movie. Underneath the picture we find fake reviews from fake film magazines. One of the lines translates: "One can watch this movie again and again, it will never be the same."


We do not have the time today to get deeper into the issue of child abuse that Ölig tries to overcome by eating the eel. The question is why and to what extent the hypertext structure is important to the story. Basically, it is not important to the story. While the authors suggest that every new combination will shed more light on the whole, we know that in reality they can not know this to be true. They certainly

have not had the time to check out every single combination. They do not completely know their own text. So how can they make such a promise?

They can, because reading the whole in a rearranged way means to read it again. This is exactly the point. Reading and rereading this piece, we finally discover the deeper meaning beneath the banal surface. However, the deeper meaning reveals not through the hypertext structure, but because of the re-reading that this structure forces. It is not the openness implied by the combinatorial possibilities of the text that is important, rather the openness of the text with respect to its meaning. The hyperfiction "Aaleskorte" makes fun of hypertext by overplaying its central feature. This fits with the ironic style we have encountered in the first page and can find throughout the text. What initially looks to be the quintessence of multilinear form turns out in the end rather to be a critique of it.

As we see, this piece of hyperfiction employs images and animation. And since the language of pictures is very important here and actually provides the key to revealing the deeper meaning, we might also have put this piece into the hypermedia section. However, since it displays multiple combinations it belongs to hyperfiction. I now turn to examples of hypermedia that focus more on multimedia than on linkage.

## 5. Hypermedia

Robert Coover, who announced the end of books in 1992, now complains in his essay  "[Literary Hypertext: The Passing of the Golden Age](#)" that digital literature is becoming more and more like movies. Concerning the multimedial web he states: "hypertext is now used more to access hypermedia as enhancements for more or less linear narratives [...] the reader is commonly obliged now to enter the media-rich but ineluctable flow as directed by the author or authors: In a sense, it's back to the movies again, that most passive and imperious of forms." Coover notes the "constant threat of hypermedia: to suck the substance out of a work of lettered art, reduce it to surface spectacle."

What Coover points out is indeed an issue of hypermedia. If the problem of hyperfiction is to link without meaning, the problem of hypermedia is to employ effects that only flex the technical muscles. It is not enough to have nice images beside the words, or sound or fancy animation. It is important that those effects justify their existence by conveying a message. There are hundreds of examples that fail. I will give two that succeed.





■ "Das Epos der Maschine" (The Epic of the Machine) by Urs Schreiber (1998) is a work that consists only of words except one graphic and a sound file, which can be put aside for now. However, we are not wrong in discussing this piece in the hypermedia section since what we encounter is again a sort of visualisation without images. The words itself represent pictures by moving in a predetermined way. If, for example, we click on the word 'Maschine' it produces words which push the former words away like technology pushes nature away.



We soon realize that this piece does not only addresses technology as a doubtful god that controls us, but it also lets us feel it. We do not know how to deal with it, we feel as though we are under the thumb of technology already. And indeed, we are.

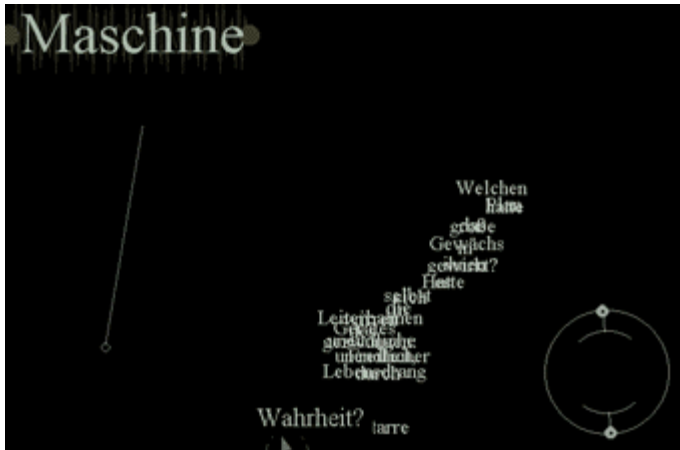
Everything is programmed. Our reading process is not as free as it used to be with books.



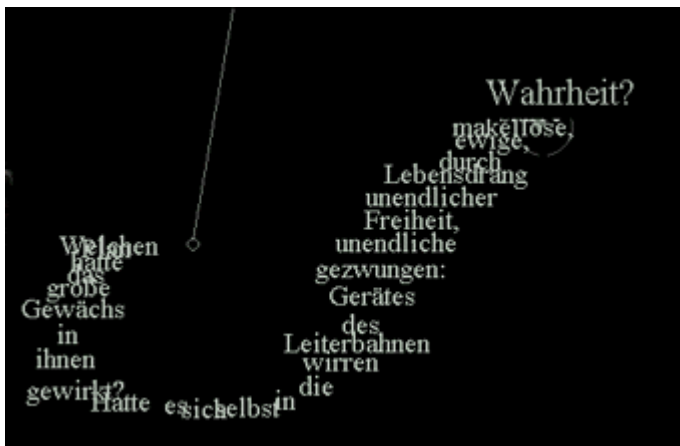
One remarkable effect is when the words, which are putting technology into question, shape into a question mark. The period of the question mark is the word 'truth' with a background like a barcode, what may lead us to the association one can buy truth.




The words are moving as if the question is alive. If we click on the word 'truth' the other words disappear behind or in it as if it has swallowed them.



However, once the question has arisen, one can not get rid of it anymore. The words sticks on the 'truth', they follow where ever it moves, they can be 'eaten' again, but not erased.



Whereas "The Epic of the Machine" creates pictures by a graphical choreography of text (another version of kinetic poetry?), the next example's visualisation is based on real images.  "Trost der Bilder" by Jürgen Daibers and Jochen Metzgers is the prizewinner of a German competition for literature on the internet in 1998 (see review in dichtung-digital). The title translates as "Consolation of Images". Actually, it should be entitled "Consolation of Stories", since the work itself consists of several short stories which can be read by clicking on them in a table of contents. One of these stories, entitled "Die Schaufensterpuppe" ("The Mannequin"), is about a man who falls in love with a mannequin. What we see is a text with a part of the mannequin's face in the margin. The text translates as follows.

My friend had fallen in love with a mannequin from the winter collection from Horten. After closing he would stand in front of the window for hours no matter how cold out it was. He was aware of the strangeness of his love, however, he wanted to be near the mannequin at any price.

One evening he hid himself in a changing room in the women's section. Once the light was turned out and the room was empty he sneaked over to her. "I took her out of the window and released her arms and legs from their unnatural position", he later told me.

The next file presents the second part of text and the second part of the mannequin's face.

He set the mannequin onto a chair. He did not undress her. He did not touch her improperly. "I just was sitting in front of her and looking at her. Everybody claims that her eyes are glassy and lifeless. But she looked at me. I swear she looked at me, in a way nobody ever has looked at me."

Next day P. was discovered by the store detective.


Having determined that nothing was stolen the director abstained from a report. P was banned from the store. He now shops at a different chain. His sweetheart disappeared in March, just when the first buds were to be seen on the branches of cherry trees. The color of her face had peeled off; she wasn't suitable for the spring collection.

There is no real sadness or even melancholy in these eyes since this is not a real person who could have reasons from her past. Nevertheless, her eyes look sad, and therefore they are intriguing, at least for those who have grown up in a culture where romantics, decadents, or whoever else may labor under the burden of ennui have declared that melancholia ennobles the soul. Those who agree that melancholia distinguishes one from the clueless, happy masses may also understand why the man in this story acts as he does.

The notion of melancholia easily fits with another concept: to live in imagination. The love for a mannequin is exactly about this. It applies to the myths of Pygmalion and Narcissus to the extent that in both cases the object of love comes out of the lover himself. Needless to say, love for a person who is not a genuine other signifies an escape from real life. The title "Consolation of Images" makes perfectly sense if one reads it as "Consolation of Imagination".

From here we might draw a connection to the reading process in general, since this too is a materialization of life in our fantasy. The joy of the aesthetic process is the joy of creation. According to constructivists, reading is nothing more than an autobiographical act or, if I may say so, to hook up with one's own personality. The assigning of meaning to words is conditioned by how our history, that is to say who

we are, has shaped our understanding of them. However, in the case under discussion this process of imagination is limited, for the mannequin is not described with words but shown as an image. The language of images dispenses with the language of words. Only because the mannequin does not materialize in language can it be taken away. The deeper meaning of this piece lies in the feature of intermediality, as well as in the programming of the reading process, which may be called the feature of performance or animation.

Our last example uses words, sound and animated images, as well as using both German and English. Fevci Konuk's  "Digital Troja" (Digital Troy) aims to discuss war in both the past and present time. In the beginning we hear Bill Clinton say: "Yesterday is yesterday, if we tried to recapture it we would only lose tomorrow". Germans who have a different relation to history may be reminded of the statement of former chancellor Willy Brandt who said that if we do not learn from the past we will not be able to handle the future.

This hidden dialogue about history is continued later when we encounter the image above. The figure in this image is Paris, who obviously wants to run away from Troy but is instead caught in an endless loop. According to the caption, we should take this to mean that there is no escape, no learning from the past, things happen over and over again. I will abstain from discussing the disanalogies between Clinton and Paris and Monica and Helene. There are obvious shortcomings throughout the work and in the work as a whole. However, here I want to show how an animated image conveys meaning because of its time setting.

The time of power and sex (poor Bill, poor Paris).



If we look at this animation we notice two breaks within the loop. In the language of animation, breaks are supposed to stress something. What could it be? I want to draw your attention to the famous sequence in Hitchcock's movie "North by Northwest" where Roger Thornhill, played by Cary Grant, realizes the danger of an approaching airplane as he stands in a wheat field. You probably remember how slowly he turns to start running. And you may be reminded of this scene while watching this piece of animation. It is the same posture. Paris looks back at the eclipsed sun as Cary Grant does at the approaching plane. I will discuss the meaning behind this allusion in a minute. Let us first look at the other break. To what could Paris' posture allude?



My suggestion is Discobolus, the ancient discus-thrower. Yes, there is a difference in the position of the arms and the arching of the back. But still, Discobolus is the first thing that comes into mind when thinking about this break. And, he makes perfect sense. While Discobolus associates with the olympic idea, Cary Grant's Thornhill brings the cold war onto the stage. We might remember 1984, when the Olympic idea failed to bridge the gap between West and East and when there were separate games. Thornhill also brings another issue in the story. Whereas Paris stands for deliberate decisions, Thornhill is a pawn in a power game and, for a long time, does not know what to do. This difference points to the contrast in power structures in past and present time. The atomic bomb fire that is shown in "Digital

Troja" again and again stresses the theme that power and danger are not a matter between two persons anymore. Things are more complicated today, and we may conclude that they are not as easily calculable as they have been in earlier times.

However this conclusion is supported by the whole work, the example shows how meaning can be transferred just by animation. In allusion to the language of words or pictures we might call this the language of time.

## 6. Epilogue

Robert Coover ends his essay about the "Golden Age of Hypertext" with a confession that he is still in love with the word. He continues, as he writes, "to feel that, for all the wondrous and provocative invasions of text by sound and image, all the intimate layering of them and irresistible fusions, still, the most radical and distinctive literary contribution of the computer has been the multilinear hypertextual webwork of text spaces, or, as one might say, the intimate layering and fusion of imagined spatiality and temporality."

This is one perspective from which one can look at the future of digital literature, here surely due to the fact that Coover himself is an award-winning writer of printed novels. Another perspective would focus on narration rather than on words, welcoming images and sound to join the word, indeed, even to take over the text. We have seen what interesting new forms of aesthetic expression lie in this option. Nevertheless, Coover is certainly right to express the danger of an art that is based on technology which allows us and tempts us to produce fancy effects. Gimmickry therefore seems to be one of the essential features of aesthetic expression in this new media. The question remains whether this undercuts digital literature or whether and if yes to what extent it provides it with its genuine subject matter?

In any event, it would not be appropriate to criticize digital literature for moving to multimedia and not behaving the same way traditional literature does. It would be equally inappropriate to look at digital literature in the light of media competition. That is, to claim that a given effect could be done in a traditional medium as well. Indeed, mostly it could. There are books providing alternatives to navigate. There are animated images in visual art. There are pictures or paintings including words. However, the point is that in digital media those features take place all together, and not as an exception but as a normal expectation.

Since digital literature is not yet a well-developed art form and is still experimenting one can not really judge its aesthetic values yet. We have seen that technical effects does not necessarily mean to "suck the substance out of a work of lettered art, reduce it to surface spectacle," it can also mean to give substance to the surface

spectacle. The authors are supposed to think and act in order to serve this purpose. We, the readers, are supposed to think twice in order to realize and acknowledge their effort. Of course, if one does not like to see words moving or images disappearing, if one objects to visualization and technical effects at all, one will object to digital literature as a whole, and decide to read a regular old book. Of course, there is nothing wrong with this. However, this is, as I mentioned at the beginning of this article, a different story.

## Notes

---

1. One might argue a fourth type would be the MUD (Multi-User Dungeon) as a special collaborative writing project where the readers are the authors of their own role as a character within the game. The features of this type would be: multiple authorship, interactivity in mono- or multimedial text that is linear and multilinear structured. One might call the MUD 'literature of total immersion' since the reader is the player of a character in a game within which he has to find a treasure, to overcome danger, to kill enemies or to marry and to manage family life in an imaginary society. The objection might be that MUDs are rather games than literature, even though they are mostly based only on words. Espen Aarseth, who works on MUDs, notes: "a MUD can not be read, only experienced" (Aarseth, "Nonlinearity" in: "Hyper/Text/Theory", edited by George P. Landow, Johns Hopkins University Press, 1994, p. 78). He sees the MUD in relation to literature "only by its eventual contributions to literary language" and stresses: "The players in a MUD generally do not regard what they do as literature, so why should we?" (see Interview with Espen Aarseth in *dichtung-digital*. I follow this perspective and do not include MUDs in my typology here. Nevertheless, in a later approach MUDs may be taken into account with respect to literature (because of their text base) and to theater (because of their character as performance).
2. See J. Yellowlees Douglas, "How Do I Stop This Thing?" Closure and Indeterminacy in Interactive Narratives in: *Hyper/Text/Theory*, ed. by George P. Landow, Johns Hopkins University Press 1994, pp. 159-188: 159: "Just as sentences are incomplete without their predicates, narratives without closure are like sentence which include only the subject and not the 'action' of a sentence." For further reading see "The End of Books – or Books without End?" by J. Yellowlees Douglas, University of Michigan Press 2000.
3. "Afternoon," Node "Work in progress". In order to prevent readers from finishing reading too early Joyce adds: "Even so, there are likely to be more opportunities



than you think there are at first. A word which doesn't yield the first time you read a section may take you elsewhere if you choose it when you encounter the section again, and sometimes what seems like a loop, like memory, heads off again in another direction [...]"