

Markku Eskelinen: Electronic literature without a map

Abstract

The paper discusses several problems that seem to define and determine the field of electronic literature in theory and practice, and suggests several strategies to remedy the situation in the spirit that is both analytical and polemical.

Electronic literature has been around at least for fifty years, and many of its typical ergodic ingredients share a cultural (pre)history that reaches back to classical antiquity and beyond (*I Ching*). Still, the cultural, economical, educational and even literary status and visibility of electronic literature is low and obscure at best, despite occasional canonisations of hypertext fiction and poetry (the works of Michael Joyce and Jim Rosenberg), literary groups such as the OuLiPo that from very early on extended their orientation beyond print literature, and the efforts of an international or semi-international organisation (ELO) to promote and preserve electronic literature - not to mention multiple and more or less influential and comprehensive theories of electronic and ergodic literature.

The days of hype and claims of novelty are or at least seem to be things of the past, and there are no longer great expectations for whatever happens to emerge from the ghetto or cloister of electronic literature. Compared to many other cultural niches, there are neither crossover successes attracting wider audiences, nor popular forms and genres of electronic literature. This condition situates electronic literature in a position similar to various avant-garde movements, although without the latter's cultural impact and influence. This paper argues for the acceptance of the elitist-experimentalist-marginal status of electronic literature, with the twist of choosing its academic, institutional and post-industrial allies and enemies accordingly.

The paper has three condensed parts: cultural, theoretical and practical. The first part charts the socio-cultural infrastructure of the field and the three main circuits of distribution and dissemination of electronic literature: commercial publishers, the free market of the Internet, and the museum/art scene, each with its own cultural and commercial logic. The position of electronic literature is further triangulated in relation to digital games (and their ergodic strength), journalism (a neighbouring field of writing), and electronic civil disobedience (for values' sake).

The second part calls for the integration of theories of electronic literature into the continuously hegemonic theories of print literature. In the academic context, electronic and ergodic literature could provide both fresh theoretical challenges to literary scholarship, which is rotting away under the dominance of cultural studies, and also a wealth of counter-examples to the presuppositions and false generalisations of implicitly or explicitly print-oriented and print-based theories. Integrative and isolationist approaches are compared and two forms of the former are isolated for further study. The preferred deep integration (made possible through modified cybertext theory) works at the level of theoretical and paradigmatic foundations of literature, whereas cheap integration (cf. Murray and Ryan) sets conservative constraints derived from mainstream print literature as norms and values supposedly assisting the birth of more user-friendly electronic literature.

The third and more speculative part of the paper divides the field of electronic literature into four dimensions: poetry/prose, fiction/non-fiction, ergodic/non-ergodic, and drama/simulation, and then locates a set of theoretical and practical blind spots arresting the development and further expansion of the field.

I Introduction: Situating electronic literature without a map

Let's begin with something we all know: we don't know much about electronic literature.¹ Who reads it, how, why, when, how often, and in what kind of context? We simply don't know, and the situation is frustratingly the same when we try to find out the usual hard facts about the gender, class, ethnicity, age, and educational and social background of the most typical readers of electronic literature – or the most untypical ones for that matter. Almost too much ink has flown around questions concerning the real or merely hypothesized changes in reading, reception and consumption that electronic literature is supposed to have caused, but almost regardless of genre there are not very many empirical studies that could tell us what exactly real and implied readers and users of electronic literature do.

To illustrate my frustration, I'll briefly discuss two examples: small scale studies of hypertext readers conducted by Douglas (2001, 73-88) and Gardner (2003) that are problematic for several reasons. Douglas's audience consisted of undergraduate students that didn't have a clue about hypertext fiction² (or about experimental fiction, which could have helped a lot), which inevitably led to highlighting its supposedly radical break with the past. Gardner's somewhat more intelligently conducted and less ideologically biased case study also focuses on amateurs³ but is of limited value, as it deliberately limits the time of reading Joyce's *Afternoon* to only 30 minutes, in which time his five readers were able to access 55 to 83 nodes. As we know it is trivially easy to read that many nodes (and many more), while the true threshold of readerly pain is crossed and the importance of strategic choices becomes apparent only when approximately 500 of *Afternoon*'s 539 nodes have been read.

As far as I know the situation is the same with the players, users and readers of text adventure games (interactive fiction) and both ergodic and non-ergodic digital poetry. Of the four main genres

¹ Here's the ELO committee's formulation: "work with an important literary aspect that takes advantage of the capabilities and contexts provided by the stand-alone or networked computer." As vague as this provisional definition is, it still manages to rule out reproductions of print in digital media, and for our purposes in this paper it is almost sufficient.

² Their ignorance is understandable as these readings took place in 1987.

³ They were amateurs in a true sense as they too didn't have any previous experience of reading hypertext fiction.

of ergodic literature Aarseth discussed in *Cybertext*, only MUDs are an exception in this respect, probably for a variety of reasons ranging from the higher self-awareness of participants to the social nature of the genre, i.e. its near complete break with the tradition of solitary reading that made real players interesting also as research objects.

As such, the non-knowledge and wilful ignorance concerning readers and audiences and the preference for hypothesized and imaginary ones (or generalisations based on the critic's own experiences) is typical of experimental literature, to the tradition of which the literary end of ergodic literature belongs. One could argue though that the difference between experimental and mainstream literature is not that great, considering the less than impressive results of reception studies with their much simpler objects of choice. Perhaps there's no need to figure out any basic facts about the audience, as there's nothing to sell due to the lack of a commercial infrastructure, but on the other hand, the lack of empirical studies is a shame, as the expectations, repertoires, strategies, and preferences of readers seem to change much more slowly than the functional, modal and generic range of electronic literature.

[a short sarcastic paragraph omitted]

The almost dysfunctional ELO directory lists 159 publishers, but amidst a welter of old info and dead links the current situation is hard to piece together. Still, it is safe to say that the majority of the listed publishers are non-profit organisations and journals; many of them are or were publishing essays and criticism on electronic literature but not the real thing. It is equally safe to say (I'd be happy to be proven wrong here) that since the emergence of the Internet electronic literature is no longer usually published offline (in the disks or CDs that seem to belong to the prehistory of electronic literature). MUDs (as almost autonomous environments for collective improvisation) and story-generators (that were and still are exercises in computer science doing its best to imitate the narrative intelligence of a two-year old) were outside the literary market to begin with, and despite the short and phenomenal success of Infocom (shut down in 1989) and the remarkable persistence of Eastgate (continuing the small press tradition in avant-garde publishing), the genres of interactive fiction and hypertext literature have for a long time been in their post-Infocom and post-Eastgate stages.

Eastgate's catalogue also clarifies a thing or two about author positions. Today (August 22, 2008) it contains 45 hypertexts (25 of them are fiction, 9 non-fiction, and 7 poetry; in addition there are four

titles that are classified as both fiction and poetry) by 40 different authors. Probably the best-known title is Michael Joyce's *Afternoon*, which is referred to as a hypertext bestseller⁴ (by its publisher), although its sales figures are not disclosed. Only five (Joyce, George P. Landow, Deena Larsen, Jim Rosenberg and Rob Swigart) of Eastgate's forty authors have published two or more titles there, the record being Larsen's three. A closer look at the publications of Eastgate authors shows that Eastgate has published only a tiny fraction of them. The rest of their oeuvre is either self-published or published in the online journals (or their offline predecessors) that are the two main publishing options in the field. In other words, it was never possible to make an ordinary career as a serious commercially published hypertext writer.

Needless to say, culturally and technologically available author positions are extremely polarised. The vast majority of authors and writers continue to write print literature, whereas one tiny minority of authors writes only electronic literature, and another tiny minority writes both print and electronic literature, usually preferring one or the other. Needless to say, print authors enjoy much higher cultural status, with all its cumulative consequences and benefits from higher media visibility to in some cases actually making a living. At the same time, production processes within the publishing industry (from writing and editing to manufacturing - and storing, in the case of books on demand) have been thoroughly digitalised, while the material format, market and distribution have remained essentially the same ever since the advent of the printing press (I'm not talking about quantitative changes). Whenever the publishing industry dreams about utilising the Internet beyond marketing and bookselling, it sees it only as an alternative or additional channel for delivering the same old same old (i.e. products that function⁵ the way books usually do), but is taken aback for many reasons including the greater risks of piracy and prize reduction. In other words, even if some day a digital commercial infrastructure does arrive, it will very likely not be designed for delivering electronic literature as we know it – or want to define it.

Still, publishers are only partly to blame. The material basis of literary works could easily be hybrid (both print and digital) and although various combinations of books and diskettes, CD-ROMs, audio cassettes, or web objects have been tried out, these experiments have been relatively rare and certainly not popular with the consuming public.⁶ The cost of adding the strengths of electronic

⁴ Probably the better term would be a steady seller due to *Afternoon*'s position as a founding text and a prime example of its genre.

⁵ In a cybertextual sense within the variety of 576 media positions.

⁶ I'm thinking of such projects as Stephanie Strickland's *V* and Lance Olsen's *10:01* – and in the backwards Finnish context my own *Interface* (1997/1998).

literature to those of the good old book is not necessarily too high, especially if the digital parts of a hybrid literary work were to be available (or downloadable) on the net and thus didn't have to be physically packaged and disseminated with the book. There seems to be a genuine lack of interest and curiosity among print authors to write and experiment with such hybrids; thus the polarisation among both authors and audiences remains high, and the vast majority in both groups has neither interest in nor experience of electronic literature. And no part of electronic literature is allowed to enter or to be smuggled into the dissemination networks of print literature.

In addition to online publications, museums, galleries, and other art venues have become interested in circulating certain types and genres of electronic literature. For obvious reasons the emphasis is on ambient (see Cayley 2002) and visual digital poetry, on conventional practices and traditions in inter- and multimedia, and perhaps on more ludic textual instruments. In any case, according to Roberto Simanowski's (2007) recent observations, various hybrid forms of intermedial art are allowing text to "survive in a hostile environment." However, Simanowski's precious text has survived in that hostile environment for decades now. There's also very little that is genuinely new in this kind of dissemination; the access to text is also localised in CAVE environments as it always was with holopoetry and will be in many literary projects utilising GPS.

So far so good; there is no commercial infrastructure for electronic literature, and neither are there crossover successes reaching wider audiences or popular forms and genres of electronic literature. So what? Pretty much everything else that is necessary is there at least in some rudimentary form: journals, anthologies, grants, creative writing programs, archives, communities, prizes, events, conferences and even an international organisation to serve and protect electronic literature (not to mention criticism and scholarship). That is pretty much all that experimental literature could ever have or hope to have, except that after the emergence of the WWW it is all there in the same loose multilingual network that is much more accessible to the interested parties than the locally shattered, usually poorly documented, and only belatedly accessible and influential cultural heritages of pre-digital and pre-Internet avant-garde and experimental literary movements.

The low cultural and educational status of electronic literature partly results from its experimental status and lack of media visibility (which strongly correlates with its general unpopularity), but there are other reasons for its situation as well: relative lack of generally recognised masterpieces

despite a few canonisations well on their way⁷, the dual hegemony of popular culture and cultural studies, ungrounded hype (the homeopathic fallacy) equating hypertext structures and human cognition, continuing emphasis on the cultural and educational importance of simulation and games that are seen as more native to networked and programmable media than any form of literature (except programming languages), and so on.

[omitted]

From the cybertextual perspective, electronic literature in its ergodic and non-ergodic forms contains a certain functional and behavioural surplus compared to the most typical media position occupied by books (static, determinate, intransient, random access, impersonal perspective, no links and interpretative user function). The big question is of course the use and use value of this surplus. To the degree that educational systems are about preservation, transmission and (re-)evaluation of mono-, multi- and trans-cultural traditions and practices, there's always a canon or canons to struggle for and against, and to the degree they are invested in contemporary struggles of power and knowledge these interests offer themselves to be addressed (thematized and formalized). [Several sentences omitted] To put it as simply as possible, there are at least two or three broad questions to be asked. To what degree does electronic literature engage and rework the canons and traditions of print literature and to what degree it should do so to gain more ground or recognition? Are there forms and themes that it is better equipped to address and implement than its print "predecessors"?⁸

By reworking I mean hypertextuality (in Genette's sense⁹) that targets the key works in the Western and other canons up to modernism and beyond, and not just the more limited sub-tradition of mostly 20th century experimental and avantgarde literatures (typical examples include John Cage's *Roaratorio* that is a transformation of Joyce's *Finnegans Wake* and Stuart Moulthrop's *forking*

⁷ The best-known case is *Afternoon's* inclusion in Norton's *Anthology of Postmodern Literature*. Canonisation or recognition through the prism of postmodernism seems to be the usual way. Brian McHale mentions Jim Rosenberg and John Cayley in his treatise on postmodernist poetry (McHale 2004) – while this move may shift the poets' status from obscurity to marginality, it also masks their connections to modernism and Oulipian traditionalism (among other things). In short, the oeuvre of these three authors contains both epistemological and ontological problems unknown to theories and practices of print modernisms and postmodernisms.

⁸ I fully appreciate these kind of questions are not usually asked to avoid sterile speculation the double helix of which must be *Hamlet on the Holodeck* (Murray 1997), a combination of unsophisticated theories that belong to the prehistory of narratology with a nonexistent technology that wasn't around then and isn't around now.

⁹ According to Genette's new and improved definition "a hypertext is a text that derives from another by a formal and/or thematic process of transformation" (Genette 2005, 10)

paths, an adaptation of Borges' *The Garden of the Forking Paths*), systematically transforms¹⁰ them and in the process shows and tests the power of behavioral surplus. Behavioral transformations don't have to be ergodic (not everything needs to be turned "interactive" or benefits from it) as there also are many untried non-ergodic positions to choose from and of course the relevant aesthetic choices do not stop but only start here. [Several sentences omitted] In short, the question is should we be content with merely annotating Dickens (a la Landow) or should we perhaps try to rewrite him? I'm not saying we should do either, but the latter option is easily available and rarely used – and as we all know even if a literary text fails aesthetically it may still be pedagogically valuable.

Be that as it may [the rest of the paragraph omitted]

However, I'm not overly concerned with economical, educational and cultural aspects; for the rest of this paper literary and cybertextual perspectives will be quite enough. As we saw in the previous paragraph, literary aspects or the literariness of electronic and ergodic literature need to be revisited.

It is useful to situate electronic literature in the continuum of ergodic literature, although electronic literature is not necessarily ergodic (cf. kinetic poetry, textual movies, "old school" text generation). Electronic literature has been around for approximately fifty years, whereas the history of ergodic literature¹¹ goes back to classic antiquity and beyond. As writing is always a spatial activity, Aarseth (1997, 9) states that there's no reason to doubt that linear and non-linear literatures have co-existed from very early on. However, there are generic and contextual differences. Aarseth's earliest examples, Egyptian wall-inscriptions and *I Ching*, are ritual, magical and religious texts, not fiction or poetry. *I Ching* is not to be read in its entirety but to be consulted - a feature that it shares with such later ergodic entities as dictionaries, encyclopaedias and instruction manuals. Philosophical and religious writing included many examples of permutation and combinatory principles (Lull; Leibniz; Bruno) centuries before they found their way into modernist and postmodernist experiments. One could argue that in non-fiction (in a broad sense including also journalism and academic writing) at least the mild forms and devices of ergodic textuality and exploratory user function (such as footnotes, endnotes, and indexes) are typical and trivial organisational principles

¹⁰ Instead of merely quoting and alluding that are intertextual practices in Genette's (1997, 2) rather narrow but very useful definition.

¹¹ We are almost without a map there too despite articles such as Cramer 2000 and projects such as Eskelinen and Koskimaa 2006.

usually operating on readers' terms and serving their informative interests. Or to put it differently, there's a considerable difference between consulting and traversing a text.

If ritual, religious, and other non-fictional texts are excluded, then the history of ergodic literature becomes considerably shorter, but it still begins, at the very latest, in the fourth century A.D. with Optatian's mesostic and permutative poetry (Higgins 1987, 5-6; Cramer 2000) - although Higgins (1987, 20) also mentions an acrostic altar-shaped pattern poem from the second century A.D.

Compared to poetry, the history of ergodic prose fiction let alone ergodic novels is much harder to piece together. The best-known examples were published in the 1960s (Saporta 1962; Cortazar 1966; Johnson 1969; Nabokov 1960)¹² but there are earlier novels with footnotes and indexes (and other devices appropriated from non-fiction) and a variety of literary machines producing combinatory prose and drama. Jörgen Schäfer (2006) finds examples of these two practices (and of explorative and configurative user functions respectively) in German literature from the 17th and 19th centuries onwards. Also in German literature these navigational and combinatory practices first appeared in poetry.

The point here is not to trace this history any further or in greater detail, but to point to certain inconsistencies at the heart of electronic literature seen from a diachronic perspective. Most ingredients of ergodic and electronic literature have been around for centuries¹³, and thus there's a heretical question to be asked: what if these qualities and functions have already found their relatively stable cultural niche or position, which is much harder to change than is usually thought, especially if these features are seen as recent digital novelties.

To conclude this section, we'll return to more contemporary matters and to the cybertextual perspective that is capable of situating any text, depending on how its medium functions, in its typology of 576 media positions and thus effectively putting an end to media essentialism and

¹² For some reason Aarseth (1997, 68-69) classifies the user functions of Saporta and Nabokov as interpretative but that of Cortazar as exploratory (and interestingly Apollinaire's *Calligrammes* as well). In other words, only the latter is ergodic. Still, each of these as well as Johnson 1969 have several presentation orders, and after deciding which path to take (in Cortazar) or constructing the path by shuffling the pages (in Saporta –and Johnson) there's only good old reading/interpreting to do – except in *Pale Fire* where the decisions have to be made on almost every step of the traversal. In this paper all four novels are taken to be ergodic because they do not present their scripts in one fixed order. As ergodic literature requires non-trivial effort then it is perhaps the definition of non-triviality that is at stake here.

¹³ Or for decades: kinetic poetry existed on film and video before expanding into the digital realm.

dichotomies¹⁴ (because of the overlapping ranges of different media). Aarseth's model is descriptive, and to a certain degree it reflects the situation and genre system of the field in the early- and mid-1990's. *Cybertext* was written and published before the emergence of ludology and game studies at the turn of the millennium, and in retrospect it is easy to divide the four genres Aarseth discussed at length into two: hypertext fiction and text generators belong to the literary end of the ergodic scale and text adventures and MUDs to the gaming end that could now be legitimately situated in the field of game studies as well. In the aftermath of ludology and game studies certain new genres, most importantly textual instruments, have also arrived on the scene.

Likewise the consequences for ergodic literature of the emergence of the WWW were not visible at the time of *Cybertext*'s publication. More than a decade later it is easy to see that the most popular attractions of the Internet are related to social communication, online communities, and an immediate access to information and entertainment (perhaps best combined in MMOGs) much more than, say, to underlying hypertext structures (and their supposed affinities with human cognition).

Seen in this light, cybertext typology seems to miss or at least downplay the crucial difference between single-user and multi-user literature¹⁵. In the latter, social communication and interaction among users is necessary for the work's aesthetic realisation. That quality sets MUDs apart from all the other genres and texts Aarseth addresses in *Cybertext*, and it also challenges the strong meta-convention of solitary reading. In that respect both ergodic and non-ergodic traditions of literature are almost in diametrical opposition to game traditions, as most non-digital games require two or more players. Moreover, if we choose to believe that "in literature we may have to configure in order to interpret whereas in games we interpret in order to configure" (Eskelinen 2001), we can describe differences between games and literature also in terms of ergodic strength and dominance, i.e. that in literary texts ergodic qualities serve users' interpretative interests and in games interpretations serve players' ergodic interests (winning, completing or simply continuing the game). Combining these two perspectives, we can finally conclude this section by making some elementary comparisons to see what if anything changed after the shift from programmable to networked and programmable media.

¹⁴ Although Aarseth briefly discusses *Book Unbound* (Cayley 1995), ergodic poetry is not discussed in *Cybertext* on the same level as the four other genres. Still, two examples of ergodic poetry are included in the selection of texts on the basis of which cybertext typology is constructed.

¹⁵ The difference could be incorporated in Aarseth's model simply by adding to it an eighth parameter called user position.

On the surface, after this shift hypertext fiction turned more verbivocovisual (or hypermedial flexibly combining visual, aural and verbal elements) and its interfaces become more attractive and complex – but these trends could equally well have happened without the WWW. The number of external links (to use Anna Gunder’s term) increased (from zero) as texts were no longer materially disconnected from each other but all in all the old and essentially closed labyrinthine model of hypertext remained the norm (instead of the two other main options of strict hierarchy and thoroughly decentred network). Although web hypertexts are ontologically different from their offline counterparts on diskettes and CDs (cf. they are not distributed in copies, they can be materially connected to other texts even to ones not existing at the moment of their publication, and the author/publisher can modify and remove them after publication) these differences didn’t much affect hypertext aesthetics. For the most part hypertext fictions also remained static and intransient, despite Stuart Moulthrop’s clever attempts to the contrary in *Hegirascope* and *Reagan Library*.

Interactive fictions (including interactive drama such as *Facade*) changed and were affected even less, although the conditions of their dissemination greatly improved as they become downloadable and more easily archived. In short they retained their status as single-user commodities.

Although there still are some 1700 MUDs, the genre gave way to its more popular and commercially successful graphic successors MMOGs, which compared to their predecessors are more clearly gaming and role-playing arenas. In the history of games, MMOGs corrected the historical anomaly in digital games by adding multi-player and multi-team games to the previous limited variety of two-player console games and single-player PC games.

Digital poetry seems to have been affected very little; according to Chris Funkhouser’s (2007, 3) recent media-archaeological work “nothing particularly new has emerged since the initiation of the WWW.” This harsh claim can be challenged by those textual instruments that are poetic, as they as well as other instruments seem to utilize at least some of the ontological differences mentioned above. Quite interestingly both single and multiplayer textual instruments are already available.

In terms of ergodics and ergodic strength, the phenomena discussed above can be divided into three groups. In the first group ergodic qualities seamlessly serve their users’ interpretative and informative interests in a naturalized way, i.e. ergodic qualities don’t complicate the search of information but assist in it and make it easier. This is the case with non-fiction and with texts that

are to be consulted and not necessarily traversed in their entirety (ritual texts, dictionaries, instruction manuals etc.). In the second group are the texts that we call literature and in which, if they have ergodic features at all, ergodic features don't dominate but only complicate the user's interpretative efforts. Games form the third group: ergodic qualities dominate and the players' interpretation serve their ergodic interests. It is worth repeating that digital multiplayer games add social interaction on top of single user ergodics between (hu)man and machine and thus run completely counter to the long duration¹⁶ invariable of solitary reading.

In short, ergodics are dominant in games, naturalised in non-fiction, and remain non-naturalised complications in fiction and poetry. Of course this is a question of degree; like everything else, explorative, configurative and textonic user functions can be diluted to the max to minimize the disturbance they cause. Still, why would anyone want to do that in electronic literature – write three node hypertexts or literary machines capable of producing only four permutations with the imbecilic help of its soon to be bored to death user, especially as the chances are that's already been done in print. It seems then that ergodic electronic literature is doomed to be experimental if it is going to be anything at all, but surprisingly there's no shortage of literary scholars who find it hard to accept the experimental-elitist-marginal status of electronic literature. We'll meet some of them in the next section of this paper.

2. Theory

The cultural, educational, literary and academic status of electronic literature is also dependent on the state of literary scholarship. The problem here is at least threefold. First, if we, as advocates, practitioners or theorists of digital literature, play by the rules of the interpretative industry, nothing will change. The hunt for meaning and the more or less idiosyncratic readings of individual works devoid of any interest in poetics or theoretical concerns will effectively erase the functional and formal differences that could play and be played for the advantage of electronic literature. An alternative approach, not necessarily against interpretation but certainly through poetics, has its own dangers, especially if it stays only in its own ghetto or to put it more mildly within the confines of electronic literature. In the early years of scholarship in our field (whatever it is called) that was an intelligent move to protect the field from real and possible theoretical colonisations, but on the one hand, that move was not ultimately successful, and on the other hand, we now have more mature

¹⁶ In Braudel's sense.

theories that are at least in principle capable of integrating the ever widening plurality of literary media to hegemonic theories of literature without succumbing to the latter.

Hence, secondly, there's a choice to be made between integrative and isolationist theories, approaches, and research programs. Electronic and ergodic literature provide fresh theoretical challenges to literary scholarship, which is rotting away under the dominance of context- and meaning-oriented cultural studies, and a wealth of well-wrought counter-examples to the presuppositions and false generalisations of implicitly or explicitly print-oriented and print-based theories of literature. Later in this section, integrative and isolationist approaches are compared, and two forms of the former are isolated for further study. The preferred deep integration (made possible through modified cybertext theory) works at the level of theoretical and paradigmatic foundations of literature whereas cheap integration (cf. Murray and Ryan) sets conservative constraints derived from mainstream print literature as norms and values supposedly assisting the birth of more user-friendly electronic literature.

Thirdly, electronic literature should choose its academic, institutional and post-industrial allies and enemies carefully. To begin with, cultural studies should perhaps be re-contextualised.

[the rest of the paragraph omitted]

2.1.1 Cheap integration, part 1: Marie-Laure Ryan

No scholar of digital or ergodic poetry in his or her right mind would dare to propose that these poeties should stick to classical norms and forms. For some reason this is not case with certain scholars dealing or trying to deal with narrative or dramatic literature or elements of literature in digital media. I'm not joking although I wish I were. Here are two quotes from Marie-Laure Ryan, written years after the golden age of hypertext literature and hypertext theory:

“What for instance will I do if in the course of my reading I encounter a segment that describes the death of a character, and later on a segment that describes his actions when alive? Should I opt for a supernatural interpretation, according to which the character was resurrected?” (Ryan 2001)

“In classical hypertext, the network is usually too densely connected for the author to control the reader's path over significant stretches. Randomness sets in after one or two transitions. But randomness is incompatible with the logical structure of narrative. Since it would be impossible for the author to foresee a coherent narrative

development for each path of navigation, the order of discovery of the lexia cannot be regarded as constitutive of narrative sequence.” (Ryan 2001)

We can only conclude that according to Ryan’s supposedly “logical” criteria even flashbacks are too complicated and incompatible with her conception of narrative coherence. Moreover, hypertext sequences are usually not totally random (very rarely if ever nodes are linked to every other node in a fully rhizomatic way), and one may also wonder whether the wide variety of possible presentation orders (of static chunks of text) would be such a challenge if one happened to be familiar with narrative and anti-narrative experiments and postmodernist tricks of mid- and late 20th century fiction.

As newcomers and even scholars can sometimes learn new tricks, let’s take a more recent example to see what if anything has changed. So let me quote in length what she (2007) has to say about Judd Morrissey’s *The Jew’s Daughter*: “The text presents itself at first sight as a standard hypertext fiction, but there is only one link per screen. This means that the author retains strict control over the reading sequence. When the user mouses over a link, part of the screen replaces itself, but the new text is inserted without visible mark somewhere in the middle of the screen, leaving the rest of the page unchanged. Only those gifted with perfect recall will be able to tell what is new and what is old. The only clue to the location of the new text is a nervous twitching of the affected area when the substitution takes place. Since it is impossible to return to the previous screen, the reader cannot compare the two fragments. This formula is designed to frustrate memory, and without memory, of course, the reader cannot construct a stable narrative world nor a consistent narrative action. To salvage some intelligibility, readers will interpret the replacement mechanism as an allegorical gesture. For instance, the text could signify the radical instability of meaning, the absence of a definitive story to tell, or it could be interpreted as a simulation of the dynamics of the writing process: the replacement could stand for false starts and for the technique of ‘cut and paste.’ As was the case with ‘The News Reader’, but for different reasons, the text is only readable on the meta level.” (Ryan 2007, 264)

This quote exemplifies an interpretative strategy that I call normative exclusion, and as always it is based on serious methodological mistakes, theoretical shortcomings and anachronistic value judgements. Firstly, *The Jew’s Daughter* is as much a stretch text as it is a hypertext, and therefore its relation to hypertext legacy is a bit more complicated than Ryan appears to understand. Secondly, Ryan seriously overstates the memory load caused by the text. As with any fiction, we

mostly rely on our less than perfect memory and proceed by making, refining and abandoning hypotheses, not by comparing new passages word by word to those already read. Thirdly, even if one cannot return to any previous screen while following the strict linearity of the text, comparisons can still be made – and they can be verified as well either by printing (or otherwise copying) the text screen by screen (node by node) or by starting the process again as many times as needed. In fact the web version¹⁷ of *The Jew's Daughter* Ryan refers to consists of 201 nodes that seem to follow each other in the same order every time (I've tried it five times so far) forming a loop, so in essence what you have is a 201 page novel that you can read without having to stretch and overload your memory. All you need is a little patience and a printer and you're well on your way to stable narrative worlds and consistent narrative actions if that's your prerogative. Fourthly, as the text can be read in its entirety and as many times as one possibly wants, Ryan's claim about its memory frustrating nature is utterly false, and her claims about its lack of stable worlds and consistent action are hard to justify, as this exercise in repetition and variation is much more consistent and stable than, say, the prime examples of the French New Novel. Fifthly, there's no reason and Ryan certainly doesn't give any reason why readers should always go for stable narrative worlds and consistent narrative action and not settle for little less, not to mention expect something else in the first place, and perhaps if necessary renegotiate their ideas of stability and consistency that will vary anyway from one reader to the next. Sixthly, from what is said above it also follows that Ryan's claim that the text is only readable on the meta level is also false. Seventhly, Ryan's false description of Morrissey's text and its resulting exclusion from the narrative realm (she also describes it as a "creative destruction of narrative") are only based on her rigid 19th century norms concerning narrative action and worlds. In essence Ryan's claims only denote her failure and unwillingness to engage a text that deviates from her rigid expectations – and the question remains what is the point of reading electronic literature from such a narrow and historically anachronistic perspective or, what is even worse, trying to argue that electronic literature should limit itself to that limbo. And last but not least what about of the ethics of this reading?

[two paragraphs omitted]

2.2 Cheap integration, part 2: Janet Murray

[omitted]

¹⁷ The later downloadable (ELO) version seems to be much longer (if I'm not mistaken it consists of 458 nodes).

2.3 Deep integration and modified cybertext theory

[omitted]

3. More practical considerations/ On with the speculation

3.1 Back to the future

In order to rethink electronic literature and speculate a bit on its future, it may be useful to go back to the future as it once was. More than 30 years ago John Barth (1976; reprinted in Barth 1997) tried to look into the future of literature and the literature of future, and rooted his prophecies and reservations in four qualities he thought characterise written literature: semiotic, anesthetic, linear and solitary. Of these four qualities Barth saw the latter two as unique to literature compared to other arts. “Literature is the only art I can think of that is normally both produced and consumed, or received, by individuals as individuals. Its audience is one person at a time even when everybody on the beach is reading *Jaws* or *Ragtime* (they’re not at all at the same word at the same moment; even if by extraordinary coincidence they were, their experience wouldn’t be communal as the experience of a concert or even a symposium is).” (Barth 1997, 163)

Although videos and DVDs have already provided the same possibility for individual spectators as well, solitary reading still remains an uncontested norm.¹⁸ Already the very phrase collective reading sounds disgusting – something typical of totalitarian regimes and repressive religious cults. The Internet has given a new boost to collaborative writing projects, but at the opposite end of the scale there seem to be no collaborative reading projects around, although it would in principle be easy to design web hypertexts within which navigational decisions and possibilities of readers will affect each other as well as the content and structure of the text (I’m not thinking about simplified versions of MUDs here, but more something like multi-user *Reagan Libraries* and *Hegirascope*). In such cases hypertext consumers would still act and read alone, but be constrained by the choices the other anonymous consumers make without being able to communicate with them.

¹⁸ Despite MUDs that are much more devices for collective improvisation and role-playing than for collective reading.

In discussing anesthetic qualities Barth writes (1997, 164) that “literature is the only one of the arts that appeals directly to none of the physical senses, though it may indirectly appeal to all of them.” This quality is based on literature being semiotic, in the sense that it transpires in the mind: “it can’t deal directly with qualities, sensations, emotions, actions, things; it can’t even deal directly, as theater can, with *imitations* of actions and emotions.” (ibid.) The physical side of consuming ergodic and non-ergodic electronic literature (outside CAVEs and physically more involving installations) is usually limited to ways of clicking, typing, and moving a mouse that are either far removed from or very limited in terms of Barth’s “sensations, emotions, actions, things.” However, with wireless digital technology, more intimate and embodied connections could be constructed between texts and human beings. If blood pressure, pulse, body temperature and other more or less intimate personal and embodied details were to shape the text in addition to or even instead of explicit choices and decisions, then, perhaps, literature could become a little less anesthetic.

Finally, in discussing linearity, the catch phrase closer to discussions around and about digital media and digital or electronic literature in particular: “Other media may deal more effectively than writing with the nonlinear and discontinuous, but it may be that writing is uniquely suited to deal with the linear and continuous aspects of human experience.” (Barth 1997, 164) Whether or not or to what degree Barth was wrong is not very important, as digital technology can be used to both boost and downplay the qualities of literature that he saw as the most fundamental. In other words, non-ergodic electronic literature may well apply the strengths of digital media to emphasize the qualities Barth referred to, without being tied to the limitations of print (or video), and also without situating itself in the long tradition of experimental and avantgarde literature.

At stake here is the difference between choosing and causing. What if unknown other readers affect the structure and content of the text I’m reading and my ways of reading are also partly responsible for the changes in the text somebody else is reading; what if my bodily qualities and measurable medical states shape and affect the text I’m reading; and what if these mechanisms were combined to otherwise linear presentation devoid of explicit choices and selections.

3.2 -3.8 [omitted]

4. Conclusions

[in progress]

References

Aarseth, Espen 1997. *Cybertext. Perspectives on ergodic literature*. Baltimore: Johns Hopkins University Press

Barth, John 1997. "The Future of Literature and the Literature of the Future" in *The Friday Book*, Baltimore: Johns Hopkins University Press, 161-165

Cage, John 1982. *Roaratorio: An Irish Circus on Finnegans Wake*. Königstein: Atheneum Verlag

Cayley, John 1995. *Book Unbound*. London: Wellsweep

Cayley, John 2002. "OVERBOARD. An Example of Ambient Time-Based Poetics in Digital Art." <http://www.dichtung-digital.org/2004/2-Cayley.htm>

Cortazar, Julio 1966. *Hopscotch [Rayuela]*. New York: Pantheon Books

Cramer, Florian 2000. "Combinatory Poetry and Literature in the Internet." http://cramer.plaintext.cc/essays/combinatory_poetry_-_permutations/

Douglas, Jane Yellowlees 2001. *The End of Books or Books without End? Reading Interactive Narratives*. Ann Arbor: University of Michigan Press

Eskelinen, Markku 1997/1998. *Interface I-II*. Helsinki:Provosoft

Eskelinen, Markku 2001a. "The Gaming Situation." In *Game Studies*, vol.1, issue 1. www.gamestudies.org/0101/eskelinen

Funkhouser, Chris 2007. *Prehistory of Digital Poetry*. Tuscaloosa: University of Alabama Press Gardner,

Gendolla, Peter and Jörgen Schäfer (eds) 1997. *The Aesthetics of Net Literature*. Bielefeld: transcript Verlag

Genette, Gérard 1997. *Palimpsests. Literature in the Second Degree*. Lincoln and London: University of Nebraska Press

Higgins, Dick 1987. *Pattern Poetry. Guide to Unknown Literature*. Albany: State University of New York Press

Johnson, B.S. 2007 [1969]. *The Unfortunates*. New York: New Directions

McHale, Brian 2004. *Obligation towards a difficult whole*. Tuscaloosa: University of Alabama Press

Moulthrop, Stuart 1987. forking paths. <http://iat.ubalt.edu/moulthrop/hypertexts/forkingpaths.html>

Moulthrop, Stuart 1995. *Hegirascope*. <http://www.smoulthrop.com/lit/hgs/>

- Moulthrop, Stuart 1999. *Reagan Library*. <http://www.smoulthrop.com/lit/rl/>
- Morrissey, Judd 2000. *The Jew's Daughter*. <http://www.thejewsdaughter.com/> Also in *Electronic Literature Collection 1* <http://collection.eliterature.org/>
- Murray, Janet H. 1997. *Hamlet on the Holodeck*. New York: The Free Press.
- Nabokov, Vladimir 1962. *Pale Fire*. New York: Weidenfeld and Nicholson
- Olsen, Lance 2005. *10:01*. Portland: Chiasmus Press
- Olsen, Lance and Tim Guthrie 2007. *10:01*. In *Electronic Literature Collection 1*. <http://collection.eliterature.org/>
- Ryan, Marie-Laure 2001. "Beyond Myth and Metaphor: The Case of Narrative in Digital Media". *Game Studies*, 1/2001. www.gamestudies.org/0101/ryan
- Ryan, Marie-Laure 2007. "Narrative and the Split Condition of Digital Textuality." In Gendolla and Schäfer (eds) 2007, 257-280
- Saporta, Marc 1962. *Composition no.1*. Paris: Seuil
- Schäfer, Jörgen 2006. "Literary Machines Made in Germany. German Proto-Cybertexts from the Baroque Era to the Present" in Markku Eskelinen and Raine Koskimaa (eds) *Cybertext Database*. <http://cybertext.hum.jyu.fi/index.php?browsebook=5>
- Simanowski, Roberto 2007. "Double Coding: Re-mediating Text in Interactive Installations." (abstract) <http://www2.let.uu.nl/remediatingliterature/newallabastracts.htm>
- Strickland, Stephanie 2002. *V: WaveSon.nets/Losing L'una*. New York: Penguin, 2002
- Strickland; Stephanie and Cynthia Lawson. *V: Vniverse*. <http://www.vniverse.com/>.
- Wardrip-Fruin, Noah 2007. "Playable Media and Textual Instruments." In Gendolla and Schäfer (eds) 2007, 211-253