

INTRODUCTION

There Is No Easy Way to Repeat This

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We think there exist a few things all the practitioners in the networked and programmable media can agree upon: we are facing new aesthetic and literary and textual objects functioning in ways that run counter to the basic assumptions of dominant theories. The field has suffered from a lack of comprehensive theory, but we think this situation has recently changed by the publication of Espen Aarseth's *Cybertext – Perspectives on Ergodic Literature*. We are not claiming it solves or will solve all the problems and riddles in the rapidly expanding field of digital textuality. We just posit it as the most heuristic and reliable point of departure so far. Here too it is a perspective allowing us to move between and across media and traditions and observe continuities and discontinuities so far neglected or overlooked.

As Aarseth defines it, cybertextuality is a perspective on all texts. It is a perspective that takes into account the material dimensions of texts, as well as each text's individual and generic ways to function. From the cybertextual point of view texts not simply are, but they *do* things; they may make us as readers to perform certain functions, or they may do things by themselves, through programming, authorial intrusion etc. Reading traditional print text requires eyeing of the lines of words, leafing through the pages, and interpreting the words, sentences and paragraphs. The functioning of hypertext requires the reader to actively choose certain links to proceed in the text, temporally conditioned texts (like Stuart Moulthrop's *Hegirascope*) require us to adjust our reading pace according to certain rules, etc. Cybertext theory directs our attention to these functions, and also serves us with conceptual tools to better understand them. We do realize the temptation to use the word cybertext in a more specific, or even

essentialist, way: cybertext as programmed digital text. Even though it goes against the spirit of cybertext theory, which specifically states that it doesn't make any essential difference between print and digital texts, we must admit ourselves to occasionally giving away to the temptation and misusing the word this way.

Cybertext theory offers us a comprehensive map of functional possibilities of texts, in contrast to *textology* (the study of the meaning of the text) it concentrates on *textonomy* (the study of the textual medium). The elementary idea is to see a text as a concrete (and not metaphorical) machine consisting of the medium, the operator and the strings of signs. The latter can be divided into *textons* (strings of signs as they are in the text) and *scriptons* (strings of signs as they appear to readers). The mechanism by which *scriptons* are generated or revealed from *textons* is called a traversal function, which in turn can be described as the combination of seven variables (dynamics, determinability, time, perspective, access, links and user functions) and their possible values.

The resulting 576 combinations (media positions) of these values and variables form a conceptually sound map of great heuristic value as soon as one understands the history of print literature has used or occupied only about ten of those positions. This fact should and could stop also the whining for the lost or otherwise passed golden age and offer a more positive challenge to truly creative writers than the current fear of multimedia, the fear quite possibly experienced to different degrees in different cultures of literacy and illiteracy.

Why not hypertext? To us cybertext theory is superior to the hype ridden hypertext theory and its amusing, undeniably influential and theoretically untenable notions of convergence, interactivity and wreaders (for starters). Firstly, cybertext theory limits hypertexts to only one set of possibilities among many others. In practice this means there are alternatives to hypertext's print like qualities like static scriptons and intransient time. Secondly, cybertext theory does not draw sharp distinctions between different media, an advantageous position when almost everything has already turned digital leaving that word devoid of any descriptive or distinctive power. It is also advantageous not to be stuck in the inevitable marketing dynamics and cycles of hype and remediation resulting from conceptual weaknesses in defining the field of research.

It's important to notice that the hypertext hype has already undermined the credibility of any claim, however well grounded, for new openings inherent to digital media. So whenever the traditional literary institutions

feel threatened enough, they can easily subsume and assimilate hypertext theory to serve their own purposes as the latter contains too many elements based on surprisingly poor readings of previous theory and a fatal misunderstanding of its own object of study. The case is different with cybertext theory as it has certain inbuilt devices to undermine and resist the colonising traditional theory formations, in a way they are already included in it.

Furthermore, one should not confuse hypertext theory with hypertext fiction. Without the inventive works of Michael Joyce, Stuart Moulthrop and Shelley Jackson we wouldn't have much to study in terms of digital narratives. The traditional paradox is of course that they too suffer from the theory built around them: the fuss about how do I stop this thing, or about the body of the text and the text of body to name only a few. There is also the commonly held misunderstanding of confusing cybertext and cyborg texts (that is, machine/computer generated texts like in the notorious example of *Racter*). Cyborg texts are just one subcategory of cybertexts, and if someone happens to have had unpleasant experiences with computer generated stories or poems, those experiences should not be used to judge the much broader category of cybertexts.

Cybertext theory is not only about literature – and we want to say this loud and clear: this is not the cyberliterature or cyberfiction yearbook, but the *cybertext* yearbook. As we all now know all too well "there is nothing outside text", but we do not want to push the envelope of textuality to banal extremes. Rather, we take a practical approach to the question: while our one foot is firmly on the traditional alphanumeric textuality, the other one is on the broader field of textuality more generally understood as signifying practices. Thus, we can have articles dealing with computer games, or, articles discussing the hybrid of 3D environment and comic book narration, or, the Internet search engines as textual medium. The cybertext approach allows us simultaneously both a natural, almost automatic, interdiscursivity and a firm identity among other practices.

Narrative theory is in a curious position between cybertext and hypertext theories. Aarseth's ergodic literature quite rightly dispenses with narrative as a master trope and dominant discursive mode. On the other hand, as narrative is thought to be non-media specific, one could argue that also narratives can use all those media positions as easily as poetry. In any case cybertext theory has formulated its standpoint against the most advanced forms of narrative theory whereas hypertext theory has seriously damaged

itself by applying ridiculously outdated narrative theories derived from Aristotle, Propp or Victorian novels. Sadly, this is not a thing of the past or mean spirited exaggeration; for example a quick look at the recent writings shows that there still are supposedly competent literary scholars of hypertexts to whom such an elementary concept as *metalepsis* is a novelty.

It's important to bear in mind that cybertext is not a new invention. Such things have appeared in print (like Raymond Queneau's *Cent Mille Milliard de Poèmes*) or even before (*I Ching*). More recently conversation programs (like *Eliza*), textual adventure games (like *Zork*) and MUDs were "there" before any hypertext fiction. On top of that cybertext theory is useful also in dealing with the continuum or tradition of exceptional or non-average hypertext fiction moving into the direction of cybertext fiction (from Joyce's *Afternoon* and its conditional links through the transient time of Moulthrop's *Hegirascope* to the intratextonic dynamics of his *Reagan Library*).

Cybertext theory brings to the fore the materiality of all texts, another under theorized and little studied dimension with the notable exceptions of Brian McHale, the Tel Quel, the tradition of artists' books and various branches of experimental (concrete, visual, sound, video and holo) poetry. There are also a number of writers who have in a significant way reflected the materiality of print pages both in their artistic work – for example authors like Raymond Federman, William Gass, and Ronald Sukenick should be mentioned here. The materiality of texts is a very potential point of contact between cybertext theory and the more traditional approaches to (print) literature.

We are very pleased that we have in this book the article describing a possible new computer paradigm, *ZigZag*, developed by Ted Nelson and implemented by Tuomas Lukka and others. Questioning, testing, and developing the medium has always been an aspect of all art. The need for this kind of reflection and self-reflection is even more crucial with our multi-conditioned digital media, which rely not only on certain technical platforms, but also on several layers of software; and not only rely but make active use of these layers – one should never forget that for cybertext theory writing and programming are just two faces of the same coin. Despite the all too evident fact that a few monopolistic enterprises do define the technical specs within which any work meant for larger audiences must work, this should not make us forget that these are totally artificial boundaries. The case of Linux has shown us that it is possible to do things differently, and – leaving economics and politics aside for the

moment – from the aesthetical point of view it is crucial to question these arbitrary hindrances to expression. What better way to challenge our already automated notions of computer mediated communication than to stop for a while to ponder a totally different computer paradigm – and what better test bench for the new paradigm than to see if it fosters new artistic and communicative practices?

In addition, we have global technology and local aesthetic and other traditions. Therefore we should not be so sure that our Western ways and habits of conceptualisation are superior to other approaches and assumptions. Some kind of dialog or comparative approach might be in order as demanding as it well might be. For example, according to the *Natyasastra*, every art contains parts of other arts, or to put it differently: it's all about remediation 1500 years before Bolter and Grusin come up with their useful concept. As cybertext theory itself is still in an initial phase, and inevitably developing and changing its face continuously, the application field is expanding even more rapidly. The Internet based discursive practices are proliferating, not to speak of the vast area of growing mobile communications systems – cybertext theory should prove usable for example when treating such an emergent field as mobile gaming. The first tentative steps in mobile gaming, however, give us just a glimpse of what is to come. As our immediate surroundings become increasingly networked, through wireless technologies like *Blue Tooth*, digital texts will be increasingly interwoven with the environments we live in. Traditional textual theory, and perhaps even Derridean deconstruction, could not possibly treat phenomena which fuse and confuse text, computer, user's body, and diverse home appliances. Hypertext theory could acknowledge interior lightning, for example, as a node in a textual network (let's say, in a horror story which shuts down your living room lights while reading) but could not really describe its functional difference from other parts of the network.

So, even though cybertext theory is highly useful in the way it helps us to better understand previous and contemporary digital and non-digital texts, its real potential will only be called upon by the further development of new media communication. The model is empirical, it can be tested, corrected, supplemented and expanded, and it is also remarkably clear and heuristic. It's not the key to everything, nothing is, but it is very efficient in filtering out intellectual noise and waste. It allows us to make elementary sense of the medium and start talking across traditions, practices, conventions and technologies.

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Our editing principles and practices may sound senselessly cruel: if some article needs heavy editing or other drastic measures, it's not worth it. The trick is, like always, to choose the right people for the right job. This runs deliberately counter to the current fashion of endless editing; in following those guidelines, you would see this compilation in print around 2003, to a greater or lesser annoyance of its contributors, editors and publishers. We see certain value in trying to publish interesting ideas before they became outdated remnants of informal but non-distributed and therefore by and large non-influential discussions. With the mix of scholarly articles, interviews, and technical papers, we hope to create a broad forum for cybertext discussion, in which practitioners, developers, designers, users, critics, and scholars may participate.

At first *Cybertext Year Book* takes the form of a book, not necessarily for too long, but long enough to establish an initial contact with even the fiercest print resistance. With this yearbook we intend to enter gradually into meaningful exchanges with traditional literary traditions, theories and institutions. That optimism is based on the insight that cybertext theory challenges these inherently conservative circuits by creating a novel perspective on all textuality. By the same token it shows a seriously undertheorized dimension in traditional scholarship and research. To be rude: if the score 576–10 is not a challenge to the latter team, the former has already won. To be cruel: this book is also an act of charity.

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