

Movements of rotation and revolution Hypertext in the Seventies

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ABSTRACT

Ted Nelson (a counter-cultural intellectual, educated at Harvard and self-educated in arts, movies and Computer Science) coined the word hypertext in 1965. Ted Nelson was planning a radically new way of managing texts and other media in a non-sequential way: by using the computer. Even at that time Nelson was dreaming of a docuverse disseminated by the Net: a world-wide “book”, with no borders, and linked to any other possible text, image, or video.

The paper focuses on the self-published book *Computer Lib/Dream Machine*, 1974, very successful among young communities of readers attracted by the idea of the computer as a way to personal liberation and political revolution. The leading metaphor of hypertextuality was the de-centralization of power to the borders, and it immediately became a manifesto, a mantra.

Computer Lib/Dream Machine is an interactive and movable book from many points of view: it is reversible, with two covers, no index. It had to be moved upside down and left-right, to be read. And the reader himself had to “move” and join the fight towards a new dimension of art and knowledge.

Comparisons with Michel Butor, Raymond Queneau and Bruno Munari are suggested.

KEYWORDS

Hypertext; interactive books; Man-Computer Interaction; Digital Humanities; Ted Nelson; *Computer Lib/Dream Machines*;

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1. Hypertext as a changing-complex-indeterminate “book”

A counter-cultural intellectual, educated at Harvard (M.A. in Sociology, after a B.A. in Philosophy at Swarthmore), and self-educated in arts, movies and Computer Science, Theodore Holm Nelson (1937) coined the word *hypertext* in 1965. The term was first used in Nelson’s paper for the ACM Conference (Association for Computing Machinery) and later, in the same year, for the International Conference on Documentation. The title of the paper is in itself a project and a promise: *A File structure for the complex, the changing and the indeterminate* (Nelson 1965). In a *file structure*, even more than in a traditional, printed book, any *complex* textuality could better express its potentiality, and *change*, and develop, like a tree or an animal, or an entire biological environment. Empowered by notes and links suggested by the reader, the text would be transformed into a cooperative, unpredictable, *indeterminate* and never-ending space for freedom, art and awareness: a *hyper-text*. An interactive “space of writing” (Bolter 1990). In a “quantum universe”, a fourth dimension, time, must be added to height, width and depth (Strehle 1992). And time means, changing, developing, transforming, *moving*. Therefore, space is renamed as *hyper-space*: a double helix of space and time, subjected to the interpretations of any different, idiosyncratic, point of view. It is absolutely astonishing that in a scientific paper submitted and positively accepted by ACM – the most ancient and renowned learned society of Computer Scientists – Nelson could focus on artistic topics using an unquestionably literary language and relying on the new perspectives opened by the rising of the Net Age. By using poetic tropes and metaphors, he did not want to express a baroque attitude, but a necessity of his time: dreaming of not-yet created objects and technologies, Nelson absolutely *had* to use neologisms and an evocative language, full of similes, images, examples, to let the audience realize what he was talking about:

This is technically accomplished by index manipulation and text patching, but to the user it acts like a multifarious, polymorphic, many-dimensional infinite blackboard.

Hypertext is then meant to guarantee “total modifiability” and interactivity with the reader (p.1). Accordingly, the metaphor suggested by Nelson is that of a magic blackboard without borders, potentially expanding beyond any limits of time and space. Speaking of “a multifarious, polymorphic, many-dimensional infinite blackboard”, Prospero’s magic is displayed in front of an audience of Computer Scientists. If a traditional blackboard cannot hold memory of every word written on it, the “infinite blackboard”, on the contrary, remembers and recalls even the “many different versions of the same set of materials”; and “these features we may call evolutionary”, Nelson adds (p.2). Hypertext is able to trace and save the *evolution* of the act of writing: that is why Nelson chooses the name ELF (Evolutionary List File) for the newborn technology. An acronym – following the current fashion in Computer Science – and a fairy character – following the ancient tradition in Literary Studies.

Nelson thought big even then, in the early Sixties: ELF should be hyper-linked to other pages and, potentially, to other books, articles, or pictures, ancient manuscripts or personal drafts, or even multimedia,

like movies and recorded music or voices, or sounds. The aim is to expand the experience of reading and writing, to empower creativity. Nelson's point of view is, at the same time, that of the reader and of the writer and, again, of the writer and the scientist. He tries to imagine what they both desire to "enhance" (as we would now say) their own reading/writing experience. In 1945 Vannevar Bush had pursued a similar aim in "As We May Think":

The original idea was to make a file for writers and scientists, much like the personal side of Bush's Memex, that would do the things such people need with the richness they would want.

But, unfortunately, "two decades later, this machine is still unavailable" – Nelson underlines. It is time to fulfill what Vannevar Bush was forced to give up, due to economic, political and technological reasons (Castellucci 2009, 99-129). Moreover, if Bush's Memex (Memory extension) is an electromechanical machine based on an obsolete technology as the microfilm, ELF is a highly sophisticated software for computers linked in a global Net. And again, if Memex considered the scientist as its ideal user (and particularly scientists involved in official, or even secret, projects), ELF is for everybody, and consequently it is "simple, user-oriented and wholly general-purpose". The "richness" hunted by writers and scientists is now shared with anybody. And the "richness" is the *movement* in itself, and the possibility of interaction between computer and user. Everybody needs a flexible, metamorphic, everlasting, cooperative text. The hypertext – as any living being – needs to be included in a spatial dimension; and therefore needs to be moved and shared; the user must have the possibility to do and undo, to make and create, to read and to write, changing perspectives, and remembering desires and aims.

In 1965, everything is on the verge, everything is about to happen, everything is *moving*. At that time, Joseph Licklider (experimental Psychologist at MIT; Director of IPTO-Information Processing Techniques Office of ARPA-Advanced Research Projects Agency) was supervising the experiments that would lead to Arpanet, the first telematic network (Licklider and Taylor 1968). Nelson is a close friend to Douglas Engelbart (electronic engineer at Stanford University) one of the pioneers of the Internet Age. Even if Nelson is not included in the team of these "official" researchers, he can exploit the frequent conversations with both Licklider and Engelbart and "stay up late" discussing with them (Hafner and Lyon 1998). He was consequently absolutely aware of what was going to happen. That is why the hypertext is a "preview" of the promised land of the Net. Nelson keenly perceived in early times how computers, once connected in a network, would change the meaning of the idea of "as we may read" forever (Ginsparg 2006). Any text or multimedia document could be "saved", recorded and, at the same time, possibly modified, interconnected and shared with users-readers all over the world, in a potentially infinite conversation.

As a matter of fact, when Nelson describes the hypertext as a revolutionary way to expand creativity by way of linking texts and multimedia in a "dynamic outlining", he is not a visionary, a lunatic – as some detractors will say; on the contrary, he had a consistent and cogent vision of the future. Over fifty years later, the Web appears to have fulfilled – partially, at least – Nelson's insight into the future. It is now perfectly clear that Nelson had understood since 1965 what the spatial metaphor of hypertext deeply implied and potentially allowed. Even from the very title of the ACM paper the three keywords stated the principal goals and the strategic plan of the new invention/discovery, and in the following years these polysemous words (*complex, changing, indeterminate*) have been re-interpreted as *dynamic, linked, and online*. At the turn of the new Millennium, the Open Access Movement will improve even more the project of connecting all kinds of books and media in a shared and open space (Castellucci 2017). As the first "constitutional" paper of the Open Access Movement declared, the Internet is the new land of possibilities, offering a place for "scientists, scholars, teachers, students and for any curious mind" (BOAI 2002).

Ted Nelson is a perfect example of the new political statements echoed by the many "armies of the night",

marching for freedom, pacifism, human rights and new rights, as well as for new scientific and artistic instances (Mailer 1968). Hypertext itself was conceived as a political *movement* (knowledge is for everybody) and a *moving, interactive* text. An object that had to move to reach the readers, connected in a global Net. And, at the same time, the verb “to move” must be considered both in its transitive and intransitive meaning: the reader becomes an active *user*, an end-user. He can/must use *tools* for thought (Rheingold 2000).

The artistic and political issues Nelson expressed in 1965 have kept *moving* in time and have *changed*, becoming more and more rich, *complex, indeterminate* to witness their innate faith in freedom, justice and creativity. Nowadays, the three hypertextual qualities can be updated according to our values and necessities and “translated” into contemporary concepts such as *sustainable, shared, open*. And again, we could recognize the legacy of the three words used by Nelson in 1965 also in FAIR Open Access principles: data must be *findable* and *accessible, interoperable, reusable*. Anybody can use and link research data (LOD) according to the universal rights and responsibilities set by the ethics of Citizen Science (Fontanin and Castellucci 2019). The epistemological revolution carried on in the Age of the Net can surely recognize the thinker, inventor, artist, Ted Nelson as one of the most noble ancestors. It is no *wonder*, therefore, that in 2016 such a “visionary” movie director as Werner Herzog chose Ted Nelson as one of the main characters of the legendary story of the Net, *Lo and behold. Reveries of the Connected World*. History and story, interview and script, movie and docufiction, are the different, “hypertextual” styles and genres that Herzog uses. The movement is going on. It is a *movement*, indeed; a (pilgrim’s) progress to obtain recognition of the universal right to knowledge.

2. Computer Lib/Dream Machines

Even before the ACM Conference, Ted Nelson had begun his career as an independent scientist-artist-inventor, thinking about a radically new way of managing texts and other media in a non-sequential way, by using the computer. Nelson was dreaming of a *docuverse*: a world-wide “book”, a *universe of documents*, with no borders, linked to any other possible text, image, or video, to be read in any direction, in any *verse*, from left to right and backward, top down and bottom up. “Everything is deeply intertwined”, says Nelson, and the sentence is so striking that it has been used also as a title for a recent, open-access book on him and his work and influence (Dechow and Struppa eds 2015).

Hypertext is in itself a *movement*. In any *sense*. Infinite movements, inside and outside the graphic layout and beyond the bibliographic unit. No borders for reading/writing, and for touching and doing, and moving, and watching and listening and perceiving, and maybe smelling too (Doering-Froger 2021). Any of the five senses could be potentially involved in the act of writing/reading. It is what we now call “immersive” or “augmented” or “enhanced” reality. Hypertext is conceived as a “book” that has to be educated to become something else: an “adaptive tool”, well trained in “machine learning”, and always ready “to go”, in disguise, in a *mobile* device, in real time (Turchi, Malizia, Castellucci 2015). Hypertext – says Nelson – enables the representation of ideas that would have been really difficult to express using the paper. Hypertext is a powerful tool for reproducing the experience of movement and interaction. And yet, at the moment, he had *only* printed paper at his disposal. He was then forced to create a paper-hypertext, a paper model, elegant as an origami and powerful as a scale simulation. In 1974, Ted Nelson’s book, *Computer Lib/Dream Machines*, was intended as a paper draft – we could say; that is, as an anticipation of what could have been soon possible (with the computers) according to the possibilities offered by the speedy and astonishing spreading of information technology in everyday life.

Maybe it was deep in Ted Nelson's genetic code this "democratic" approach to machines and tools, beyond the undisputed primacy of the traditional printed text over other "movable" media (incidentally: his father, Ralph Nelson, was a very well-known movie director, and his mother Celeste Holm, an actress). The printed book, non-modifiable, scarcely interactive, could not contain the movement of life. The book is *uneditable* – a computer scientist would now say. A "machine" was needed to carry the reader everywhere. And the reader himself was supposed to drive the car by himself. *Put the hands on!* Richard Stallman would have said some years later, continuing the glorious season of Homebrew Computer Club, adding to the artisanal practice the epistemological theory: the request for recognition of a universal right to knowledge and awareness. Every software had to be free (no money required), open (no password required) and could be improved thanks to the collaborative and voluntary work not only of researchers but also of "geeks" and common people. Everybody can (and must) do by himself: reaching the matrix, enhancing the system, sharing the results (Stallman 2015).

The revolution of Free Software and Open Source wouldn't have been possible if Ted Nelson had not sown the seeds of a technological and theoretical project. In 1974, in *Computer Lib/Dream Machines*, he offered the readers a *movable* book that – in its turn – *moved* an entire generation to change. As Nelson declared in the caption below the image on the cover, *You can and must understand computers NOW* (in capital letters!). It is time. No more delays. The revolutionary project is that of re-shaping the very idea of "book" and of "reading" by using the computers to *augment* interactivity (Engelbart 1962). As young pupils do, readers had to learn a new alphabet, a new language, a new *literacy* – as we now say (Lana 2020). Everybody can manage. And everybody can even "build" a book for themselves. In a narrow span of time, "the Typographical man" has evolved into a new species (McLuhan 1962). Now, in 1974, the "Homo technologicus" has become self-reliant and perfectly aware of the importance of his technological education (Mumford 1934). Or better, an appropriate technological AND political education – where AND clearly stands for the Boolean operator that requires at least two terms in co-presence to express a relevant meaning.

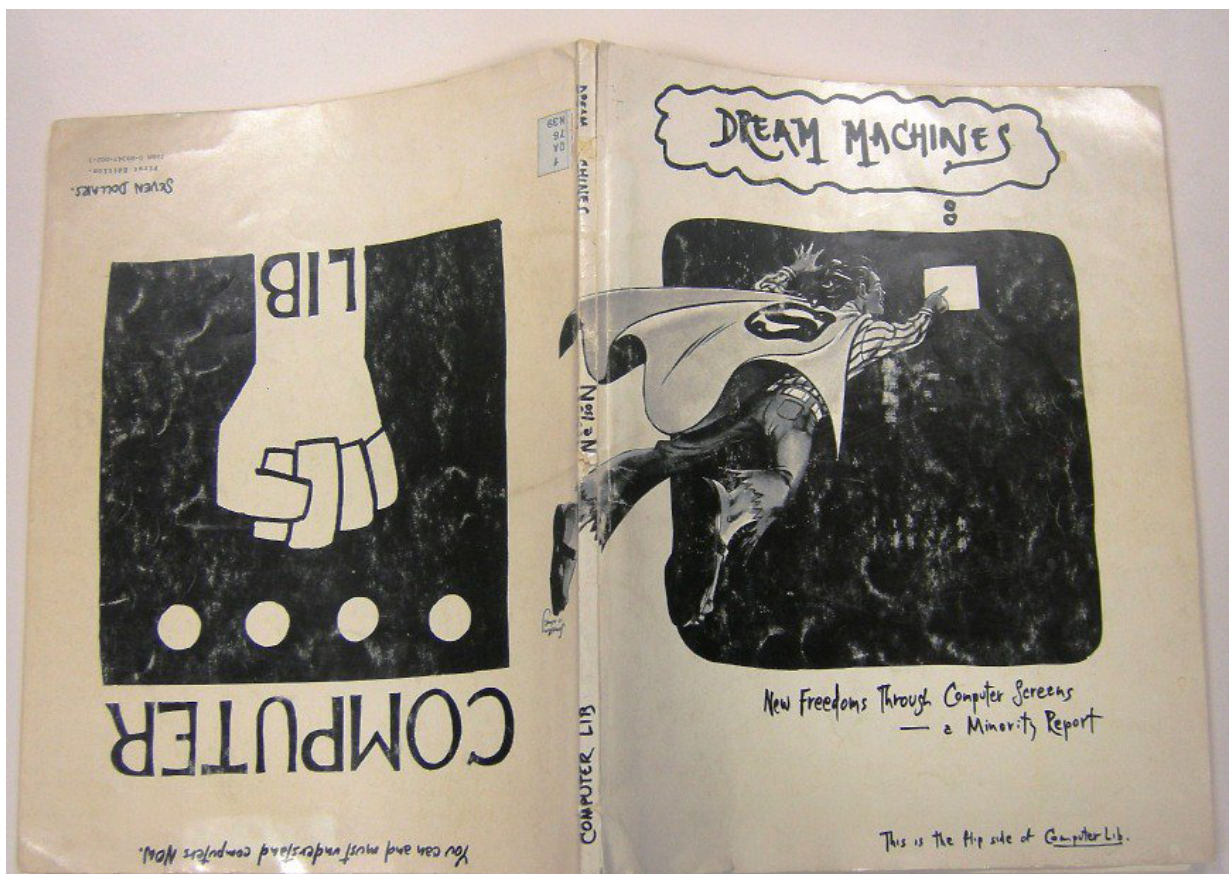
Computer Lib/Dream Machines is in itself an astonishing example: it is a technical book devoted to informatics (how to *make* beautiful and interesting things, with the computers); and, at the same time, it is a political essay inspired by Thomas Paine's *The Rights of Man* and *Common Sense* (how to *make* a choice and assert individual freedom and social equality). A revolutionary act is due in both cases. The epistemological issue (overcoming illiteracy) is deeply intertwined with the need to acquire new practices (information technology), and to understand an entire, coherent, vision of the future (information society). As Cultural Studies pioneers have always stated, following Antonio Gramsci: it is absolutely necessary to take control over "hegemonic knowledge"; and this also implies to learn how to use new tools (Williams 1958). Even the material aspects of *Computer Lib/Dream Machines* echoed the content: the book is home-made, self-illustrated, self-published, self-distributed by Ted Nelson. The result is a magnificent work of art as far as the bibliographical features are considered: a richly decorated book, with two covers with letterings, drawings and cartoons, by Nelson himself. Inside, the layout of the pages changes according to the "rhythm" of the content: one or two columns; justified or heralded text. The artisanal/artistic quality of the book is underlined by many other aspects. As an example: *Computer Lib/Dream Machines* was advertised mainly thanks to word of mouth, and Nelson himself was personally in charge of the distribution. Any reader could write him to order a copy; the delivery was by regular mail; sometimes Nelson signed the copy or added a dedication. Any copy is then unique and, consequently, the prices of collectors are now very high, in a range that goes from around 250 dollars to almost 1000, depending on the condition of the used book. The book is now on sale again, in a kind of anastatic copy, at the cost of 120 dollars: this demonstrates that the book market, the antiquarian market – so to speak – is very interested in this artifact. Nelson himself continues to sell it by using his own personal web sites (Hyperland.com) or self-publishing sites (Lulu.

com). After so many years the book has not lost its original appeal – as the advertising on computerlib-book.com appropriately underlines:

Computer Lib/Dream Machines is two books interwined. *Computer Lib* explains the inner workings of the computer to the layman. *Dream Machines* discusses the potential of computers and predicts the future of artificial intelligence, animation, hypertext, virtual reality... much of what has come to pass. Yesterday's fiction was Ted's reality and is now today's reality. This copy is a reprint of the first edition in the original large, soft back format. There are very limited quantities available. All sales go directly to Ted. This book has inspired many of today's greatest technologists and entrepreneurs, and in some cases is the original reason they got into computers. And with this re-publishing, the hope is that this book will continue to inspire the next generations to explore humans, machines, how they relate, and how they could relate.

3. Stand up for your rights!

As this advertising adequately points out, *Computer Lib/Dream Machines* is a movable book from many points of view. It is reversible, with two covers that present two different “stories”: *Computer Lib* (*Lib* both stands for *liberation* and *library*) and *Dream Machines* (the computer). We have to turn the pages (movement of *rotation*) as we always do for any traditional paper book. But another voluntary (and innovative) act is implied in order to read specifically *Computer Lib/Dream Machines*: as the slash in the title evokes, it is necessary to choose from which “side” to start, whether side A, or side B, as when listening to vinyl records. The movement is then learned by imitation from other media: the reader has to *reverse* the book upside down (movement of *revolution*).



Computer Lib/Dream Machines: two covers

The movement implied to read *Computer Lib/Dream Machines* is then evocative of a gesture of everyday life in the Seventies. But at the same time it also echoes a mythical dimension: the reader holds the book in his hands and moves it, like a sphere. The author has materially made that hyper-book, as if it was a sculpture. And the reader – like Atlas – holds in hand a globe-like book. The scene has been surely imagined in advance: the reader managing the book is the “performance” the author desires to enact. A completely different interaction compared to the one inspired by the globe-like book by Michel Butor: in that case the reader can only admire the unreadable book, like a visitor at an art exhibition. He can be admiring or amused. In any case, the reader is simply an observer, and cannot touch the globe-like book at all! It is more like a sculpture: like Alexander Calder’s *Mobiles* or Bruno Munari’s *Kinetic Objects* (Munari 2007). On the contrary, Ted Nelson does not put any restriction to the movement of the reader, to his right to touch and – metaphorically speaking – to reverse the point of view of reading.

The reader of *Computer Lib/Dream Machines* has to move the entire book, not some particular “animated”, interactive, pages. A completely different movement compared even to one of the most astonishing, poetic and *moving* movable books: Raymond Queneau’s *A Hundred Thousand Billion Poems* (1961), where the reader has to turn any single *line* to exploit a personalized and combinatory book of poetry. Ted Nelson rather wants the reader to become aware of its power; he wants the reader to be aware of the new politics and policies about how to manage books/how to “manage” knowledge, following an active, pro-active, attitude. *Computer lib/Dream machines* is then infotainment but also a practical handbook; it is an artist’s book but also a political essay. It is a *Thinkertoy* – as Nelson says (Castellucci 2002). It is a counter-cultural *movement* (Markoff 2005).

Like a two-faced idol, the book satisfies different desires: *Computer Lib* is mainly a self-help handbook in Computer Science; on the other hand, *Dream machines* is an essay with witty and profound philosophical and political considerations devoted to the right to education, the right to information, and the right to informatics, too. Each cover anticipates the content to the readers. *Computer Lib* shows the symbol of the Black Panthers in the foreground: a closed, upright fist. Nelson clearly refers to Tommie Smith and John Carlos, at the Olympic Games, Mexico City, in 1968. And the reader himself is implicitly invited to join the fight, as the sub-title clearly states: *You can and must understand computers NOW*. In capital letters, as if it were a dazibao, written in marker pens.

On the other hand (literally!), reversing the book, the cover of *Dream machines* shows a self-portrait of Ted Nelson-Superman in jeans and T-shirt, and cloak, flying into the screen of a computer (clearly referring to the Hyperspace Jump in Star Wars movies). The subtitle is *A minority report* and alludes both to the right to state a position the majority does not agree with, and to the homonymous science fiction short story by Philip K. Dick (1956). Both Philip Dick’s story and Ted Nelson’s handbook deal with technical and mental skills for predicting the future; and both have a strong, political significance: the de-centralization of any kind of power to *borders*. Nelson at the moment is against the centralization and monopoly of IBM; and later on he will throw himself at other enemies: against the supposed “different” Mac (Nelson 1997); and again, against Microsoft’s poisoned gifts (Nelson 2009). Nelson has always underlined the differences between *his* “hypertext” and *theirs* that are ONLY “COSMETICS” – screams Nelson in capital letters.

The reader (of books) and the user (of computers) must be both free to choose and to rely on themselves. Self-education, self-reliance, are needed: the reader is on the deck in command of the ship. He can autonomously *move* the book to steer the ship of reading (Murray 1998). The reader must *move* to join the fight, to obtain the recognition of new rights towards a free access to art, knowledge and technology. *New freedoms through the computer screen*, is the motto of this “side” of the book. Once again “moving” is a large and layered metaphor: the reader can *move through* and go beyond. And the reader can even touch, overcoming conventional rules. Some years later, a great fan of Nelson, Tim Berners-Lee, would have

continued the revolutionary progress by overthrowing even the most severe prohibition with the Web: if in libraries we are rightly bound to respect certain rules (i.e. “do not mark the pages of the books”), on the contrary, in the cooperative, world wide library, we must follow the links of underlined hyperbooks. A new law, a new “protocol” (http), and a new “language” (html, hyper-text markup language) invite readers and users to “mark” their text with links and notes. We could say that Nelson’s handbook taught Berners-Lee how to build, by himself, a “computer lib” that could be used daily by common people without any kind of training (Berners-Lee 1999). So, the Web is a hypertext conceived by a reader that had decided to join the fight and to make a new, movable “book”, the Web.

As a matter of fact, *Computer Lib/Dream Machines* turned out to be very successful in juvenile communities of readers attracted by the idea of the computer as a way to personal liberation and political revolution. Like Tim Berners-Lee, many other young readers remained impressed and fascinated by the promise of change, freedom and “cultural justice” (Ross 1998). *You*, reader, must dare to move the book (the world) upside down. *You*, writer, must dare to connect, to hyper-link different works and styles and genres. High and low, against the literary canon. And against moral prejudices and political discrimination, too. What could be considered “counterculture” in the Sixties, is current culture in the Seventies. The book quickly became a manifesto, a mantra (Bogost 2007). As Ted Nelson used to say, “everybody, suddenly started talking about hypertext” (Nyce and Khan 1991).

4. Moving back to the Seventies, moving back to the future

Nowadays millions of people all over the world daily connect to the Web – the hypertextual object *par excellence* – but they probably do not know what the term *hypertext* means. They type *http* on the keyboard without paying attention to the *ht* (hypertext), just looking for an electronic resource to reach: the “thing” has overcome the “word”, the technological application has overwhelmed the theoretical assumption. Right now, there are a lot of people entering the field of Digital Humanities who cannot remember the history before the World Wide Web. It is time to go back to the dawn of the Net in order to both paint the picture and give a critical account of it, considering the Seventies as a turning point: a visionary prediction and a keen and aware vision of “the shape of things to come”, in the words of H.G. Wells.

The primary audience would be in literature programs and digital media programs, carrying on a project started thirty years ago by many eminent scholars of Literature, History of the Book, Philology, etc. who “migrated” to Informatics (Bolter 1990); (Landow 1992); (McGann 2001). Over thirty years ago, scholars and librarians were among the first ones to reach out and describe the New World of the Digital Revolution. Re-reading *Computer Lib/Dream Machines* will therefore offer an opportunity to reconsider ourselves as scholars, librarians, citizens. In Nelson’s handbook, comic album, docufiction, *conte philosophique*, we can now find a tale and an autobiography, an essay and an utopian plan (Nelson 2010).

A keyword has marked both Literary Theory and Informatics: interaction. As Nelson had envisioned in *Computer Lib/Dream Machines*, the Age of the Net has determined a radical change as far as the dialogue author/reader is concerned. If the author, in the past, had always been used to seek for a direct contact with the reader, now the reader too has developed a new identity far beyond the traditional one (Welsch 1992). Nowadays, not only the reader and the author freely move and meet face to face in the hyper-connected and “social” space of writing, but the reader himself wants to tell stories. Especially after the Web 2.0 there are many more possibilities of directly offering “content” in a global scale. Both author and reader are considered *creators* (using in a broader sense one of the Dublin Core tags, 2001).

The critical theorist George P. Landow rightly interprets Nelson’s work as a true revolution, an epistemic

shift, opening new territories both to scholarly literature and fictional stories. In 1992, George P. Landow (Professor of English at Brown Un.) published a successful book: *Hypertext: The Convergence of Contemporary Critical Theory and Technology*. In this book, Landow illustrated the etymological and epistemological history of this term (from Vannevar Bush, and before, to Ted Nelson and beyond). According to Landow, *hypertext* is a “paradigm” of the entire Postmodern Age. As a matter of fact, Roland Barthes, Gilles Deleuze, Jacques Derrida, Michel Foucault, have chosen hypertextual metaphors to describe textuality, even without knowing the neologism. Landow’s thesis was that both humanistic scholars and Computer Science pioneers have shared a common theoretic kernel, that is: decentralization and renegotiation of “authoriality” and democratization of authority. Informatics and Critical Theory (especially Deconstructionism and Post-Modernism) have gone along their own separated “forking paths” to reach the same assumptions. Therefore, hypertext could be taken as a representation of the “spirit of the Age”.

It is important to underline that in 1992 – when Landow’s book was published – the first Web site was launched in Europe by Tim Berners-Lee: www.cern.ch. However, just a few (mainly information scientists) knew about it at that time. In fact, Landow does not mention the Net at all; instead, he puts a lot of HyperCard pictures in his book. Moreover, the very format of the book and the fluorescent colors of the cover, are other important clues: Landow wants to underline, by whatever means, *the convergence of critical theory and technology*, the convergence of higher and lower culture. Due to the rapid evolution of the Web and of digital media, Landow was forced to published two new editions, in 1997 and in 2006. He also had to change the pictures, substituting the ones taken from HyperCard with others taken from the Web. In the last edition (2006), he also decided to change the subtitle: *Critical theory and New Media in an Era of Globalization*.

More than thirty years after the birth of the Web, we can now concentrate more on *theory*. We should then come back to the “convergence” that was deleted in Landow’s latest edition. What we really need now is a sense of *awareness*: about the literary premise of the idea of *hypertext*, and about the multidisciplinary consequences. After twenty years since the beginning of the Web, after Google, after the social networks and the Open Access Movement, the *story* of hypertext has reached a sort of “conclusion”. We are then free to go back to literature and to tell the *story*, the “literary *biography*” of hypertext and not the history of its ancillary, subsidiary position in comparison with the successful technological hypertext, the Web. This situation offers us a vantage point to better analyze the influence of hypertextuality on the very idea of text and on the act of reading in a multimedia world. Instead of desperately trying to run after a continuously evolving technology with updated editions of a history of convergence, we can now tell the *story* of the successful blurring of borders, *moving* between disciplinary territories and authoritative roles.

Self-archiving, self-casting, self-publishing, end-user, interactive tools: these are the terms that are beginning to be used in the Internet Age. The conversation between author and reader is now not necessarily mediated by the publisher, who is no more the third-part judge, the authoritative voice that guarantees the value. Instead, the author using the Net proudly puts himself in a peer-to-peer relationship with the reader. The self is becoming the propelling centre of both scholarly and artistic-artisanal (hand-made) “radiant textuality” (McGann 2001). As Elizabeth Eisenstein would say, e-publication is “an agent of change” radically transforming communication, cultural events and institutions. Information and Communication Technologies (and a marginalized disciplinary area such as Documentation) give us a point of view that in retrospect enables us to see the mighty self of Ted Nelson as prophetic more than anomalous (Castellucci and Mori 2021). Escaping the patronizing control of editors, publishers and critics, *Computer Lib/Dream Machines* jumps directly from the manuscript to self-publication, invites readers to move, to act, to interact, and appears surprisingly updated.

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