

# Bibliotekarstudentens nettleksikon om litteratur og medier

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Om leksikonet: [https://www.litteraturogmedieleksikon.no/gallery/om\\_leksikonet.pdf](https://www.litteraturogmedieleksikon.no/gallery/om_leksikonet.pdf)

## Hypertekst

Et prinsipp for å organisere tekster i et digitalt medium. Organisering og tilgjengeliggjøring av digitale dokumenter ved elektroniske koblinger mellom dokumentene.

Det lineære og statiske blitt brutt opp i komponenter, og det relativt ikke-hierarkiske som oppstår, gir leseren flere påvirkningsmuligheter enn i tradisjonelle (ikke-digitale) tekster. “Hypertext is a mode of textuality that encourages writerly, active reading rather than passive consumption of what has been produced by a conventionally authorial author.” (Gaggi 1997 s. 104)

“Hypertext is essentially a network of links between words, ideas and sources that has neither a centre nor an end. We ‘read’ hypertext by navigating through it, taking detours to notes, and to notes to those notes, exploring what in print culture would be described as ‘digressions’ as long and complex as the ‘main’ text. Any other document can be linked to and become part of another text. ‘Computerised hypertext incorporates marginalia and commentaries to the text by other writers, updates, revisions, abstracts, digests, misinterpretations, and as in citation indexing, all bibliographic references to the work’ (Kelly, 1994:462). The extent of hypertext is unknowable because it lacks clear boundaries and is often multi-authored.”  
(Snyder 1997 s. 18-19)

“Hypertext is an information medium that exists only on-line in a computer. A structure composed of blocks of text connected by electronic links, it offers different pathways to users. Hypertext provides a means of arranging information in a non-linear manner with the computer automating the process of connecting one piece of information to another. When the structure accommodates not only printed texts but also digitised sound, graphics, animation, video and virtual reality, it is referred to as ‘hypermedia’.” (Snyder 1997 s. ix)

Noen oppfatter hypertekst som en blanding av tekst og datateknikk, dvs. som en tekst-teknologi. Men hypertekst kan også oppfattes som forskjellige typer tekst-teknologier, bl.a. avhengig av hvilke programmer som anvendes for å frambringe og lese dem. Å kalle hypertekst for teknologi innebærer fokus på den digitale apparaturen (i vid forstand) som hypertekster ikke kan eksistere uten, verken for å

skrives eller leses. Johndan Johnson-Eilola hevder at bruken av hypertext er teknologisk ved å forutsette datamaskiner, men også at bruken er styrt av "institutional forces authorizing certain types of readings and writings over others" (Johnson-Eilola 1997 s. 19). Mer pragmatisk har hypertext blitt definert som en tekst som ikke lar seg trykke i sin faktiske struktur (Joyce 1995 s. 184). Hypertext kan oppfattes som en relativt spesifikk organiseringsmåte av tekst med mulighet for å presentere denne organiseringen visuelt. Teksten er særegen ved sin form. Ifølge Peter Whalley er hypertext en "text form" (gjengitt fra McKnight, Dillon og Richardson 1993 s. 7). Rouet m.fl. kaller hypertext et "information presentation medium" (Rouet m.fl. 1996 s. 39). Pierre Lévy oppfatter hypertext som en matrise av potensielle tekster, noe som peker i retning filosofiske (ontologiske) problemstillinger (Lévy 1997 s. 68).

"Worldwide access to the internet means that for the first time in history a new form of literacy is being developed simultaneously on a global scale (Hawisher and Selfe, 2000). The fragmentary structures encountered in hypertexts reflect wider cultural paradigms characterised by all manner of fragmentation. Hypertextual literacy, with its distinct acceptance of quick transitions and constant need for active interaction, both mimics and reinforces contemporary trends observed in news broadcasts, the editing of television and cinema, and postmodern literature. All of these could be said to exhibit fuzzy coherence, in the sense that their coherence is at once contingent upon both a wide variety of idiosyncratic interpretations and upon personally tailored paths through textual spaces." (Jukka Tyrkkö i <https://www.tandfonline.com/doi/full/10.1080/13825570701452722>; lesedato 07.08.19)

"Where text is linear, hypertext can be lateral as well. Where traditional conventions of writing and reading depend on (or create artificially) hierarchies of importance, hypertext can also represent more complex, 'rhizomatic' relationships between ideas (Burbules & Callister 1996a). Where traditional text depends upon the disciplines of the Outline and the Syllogism, hypertext opens up the additional textual possibilities of Bricolage and Juxtaposition: *assembling* texts from pieces that can be represented in multiple relations to one another. These two new disciplines, it should be seen, are still disciplines themselves, contrasting in certain respects to the traditional pair (Outline versus Bricolage; Syllogism versus Juxtaposition), but as *supplements* to them, not necessarily *replacements* for them. Bricolage and Juxtaposition, more suited in some ways to the forms of hypertext, less linear, more lateral, have their own advantages and disadvantages, as the Outline and Syllogism do." (Snyder 1998 s. 107)

Den tidlige amerikanske "vision of hypertext reflects the classic American quest – a charting of the wilderness, an imposition of order over chaos, and the mastery of vast resources for concrete, practical purposes. In [Vannevar] Bush's view, the infinite web of human knowledge is a solvable maze, open to rational organization." (Murray 2000 s. 91)

Ordet “hypertekst” ble lagd av amerikaneren Theodor H. (Ted) Nelson i 1965 og var ment å fortelle om disse tekstenes egenskaper (Nelson gjengitt fra Tuman 1992 s. 49). Den greske forstavelsen “hyper-” har “(ut)over” som grunnbetydning. Den tyske matematikeren Felix Christian Klein skrev om såkalte hyperbolske rom (rom styrt av ikke-euklisk geometri) på 1870-tallet. Forstavelsen/prefikset er i dag kjent i fremmedord som “hyperaktiv”, “hypermoderne”, “hyperkorrekt” o.l. “Hyper” henviser også til at “for mye” tekst er samlet, med linker (lenker) som tegn på åpenhet og interaktivitet (Klepper, Mayer og Schneck 1996 s. 133).

Ted Nelson skriver om da han oppfant ordet: “*Hypertext* was an audacious choice: *hyper-* has a bad odor in some fields and can suggest agitation and pathology, as it does in medicine and psychology. But in other sciences *hyper-* connotes extension and generality, as in the mathematical *hyper-space*, and this was the connotation I wanted to give the idea.” (sitert fra Tuman 1992 s. 49)

“Nelson’s idea of *authored* hypermedia was concurrent with an increasing trend in literary theory towards discounting the author, instead emphasising the potentially infinite associative connections between texts. Julia Kristeva introduced the concept of intertextuality in 1967, just two years after Nelson coined the term hypertext.” (Jill Walker i <http://jilltxt.net/txt/FeralHypertext.pdf>; lesedato 03.05.17)

Nelson hevdet at “there is only one hypertext – the docuverse, or sum total of all that is represented in writing.” (Tuman 1992 s. 9) “Hypertext encourages us to think of all texts as occupying the same writing space, and to regard any one author as simply adding new elements and links to that space. In a sense, all an author adds is new links among previous elements. In the world of hypertext, to write is to make connections.” (Tuman 1992 s. 23)

“In hypertext, everything is intertwined and intermingled with everything else; or as Nelson puts it, ‘intertwingled’ (1978:DM2). Nelson’s vision of hypertext materialised in the form of Engelbart’s NLS (oNLineSystem), later renamed ‘Augment’.” (Snyder 1997 s. 25)

Forskning har vist at når en bruker klikker på en link, forventer brukeren utfyllende informasjon, en ytterligere forklaring, en kilde eller et kort bevis – altså er reduksjon av usikkerhet (Saemmer og Tréhondart 2017 s. 196).

“[T]he ideal hypertext would be one in which all elements are subject to recombination. A hypertext wants in fact to be nothing but a network of links.” (Tuman 1992 s. 41) Leserne blir da “wreaders” (Landow 1994 s. 14), en blanding av medskapere/forfattere av verket (“writers”) og lesere (“readers”). “Hypertext gives to readers the power that had once been the prerogative of the author. In hypertext, consequently, the reader can become an active, independent and autonomous constructor of meaning.” (Snyder 1997 s. 62)

Hypertext “consists of a series of documents connected to one another by links; that is, it is a text of many fragments but no whole, no master text. And by virtue of its very lack of center, its abuse of what [Janet] Murray terms “the clear-cut trail,” the hypertext invites us to find our own way, even to find some pleasure or profit in its very decenteredness.” (J. P. Telotte i Mathijs og Mendik 2008 s. 272) Alan C. Purves har fokusert på “decentralization, as represented through the ideas of hypertext and hyperspace. If space is multidimensional and seemingly infinite, it is hard to locate its single center; the center is where each of us is, but that is our center, not *the* center.” (Purves 1998 s. 14) Leseren driver “performativ lesing” (Suter 1999 s. 65) og foretar “receptive sprang mellom forskjellige fragmenter eller mellom forskjellige nivåer” (Münker og Roesler 1997 s. 319). “[T]he reader of a hypertext simultaneously reads and composes.” (Purves 1998 s. 36)

“[T]o borrow Michael Joyce’s (1988) useful categories, hypertexts can be ‘exploratory’ or ‘constructive’, depending upon whether readers ‘browse’ through a body of information already assembled or ‘write’ their own texts, transforming prior knowledge by acting upon what they read and write.” (Snyder 1998 s. 10)

“[I]n a world of hypertext the reader’s attitude toward the text changes. The original text no longer seems inviolate; the reader is invited to move in and through the text adding his or her own notes. Any text becomes a temporary structure in a changing web of relations with other, past and future, textual structures. In the culture that reads and writes electronically, the original text loses its privileged status.” (Tuman 1992 s. 35-36)

“Unlike an encyclopaedia, however, a hypertext does not present its readers with a predefined structure.” (Snyder 1997 s. 16)

“Hypertext also has more popular uses in the compilation of directories, catalogues, dictionaries, how-to manuals or any other text through which readers normally move in an order of their own choosing.” (Snyder 1997 s. 16)

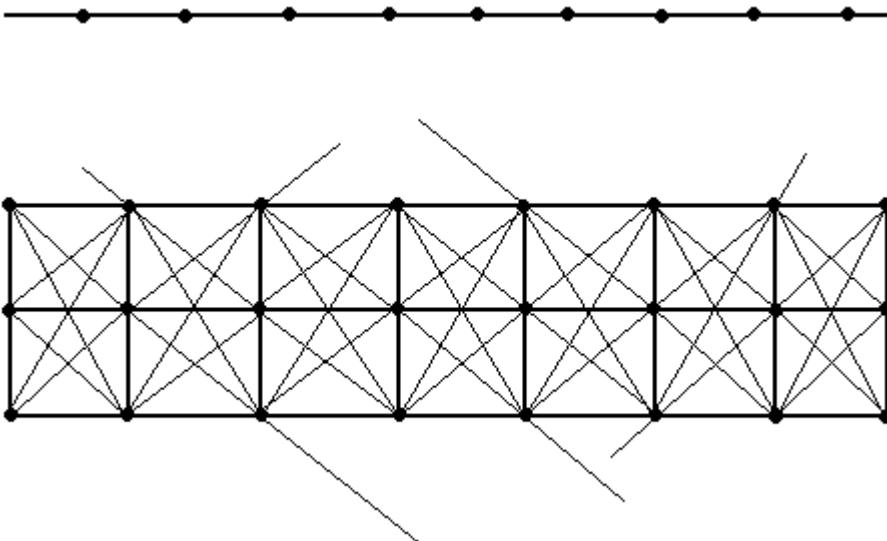
Det ble før Internett lagd “large-scale hypertext systems such as the oft-cited aeroplane manual” (Jill Walker i <http://jilltxt.net/txt/FeralHypertext.pdf>; lesetato 03.05.17), altså hypertexter som inneholdt enormt mye materiale til praktisk yrkesbruk. “[S]ome of the greatest interest in these new information technologies arises in applications, such as aircraft repair manuals, in which the limitations of book technology have long been apparent. The repair manual for a modern airliner runs to 100,000 pages, of which very many, say 25 percent, change each year. Since FAA regulations require aircraft mechanics to consult these manuals for changes and government advisories each time they carry out any repair or maintenance procedure, they probably devote a greater portion of their work day to consulting books than does the average instructor in a department of literature” (Landow 1994 s. 7-8).

“Walter J. Ong argues that “[p]rint creates a new sense of the private ownership of words” and that “resentment at plagiarism” develops with writing (131). Hypertext, in contrast, reinforces a sense of learning more as a communal than an individual endeavor. It creates situations in which individual contributions are likely to get lost within the conversation as a whole, and it creates new kinds of communities emancipated from physical, geographical, or political boundaries. Exchange of ideas and information in hypertext is something more like the way problems are dealt with in “live” conversations than in printed books. When an understanding or solution emerges from a casual conversation or an informal meeting it may be difficult or impossible to determine how much each participant contributed to the result. Even if a specific individual made a proposal that was finally accepted, others very likely contributed by helping focus discussion, eliminating bad possibilities, making suggestions that helped lead discussion toward the solution, encouraging promising suggestions, or making any number of subtle contributions. Hypertext – like a conversation – encourages a value system that emphasizes the solving of problems and the growth of learning by and for the good of the community as a whole, rather than one that insists that individuals always be recognized and rewarded for the exact part that they have played in that communal endeavor.” (Gaggi 1997 s. 106-107)

Amerikaneren George P. Landow “argues that “from the point of view of the author of hypertext, for whom collaboration and sharing are of the essence of ‘writing,’ restrictions on the availability of text, like prohibitions against copying or linking, appear absurd, indeed immoral, constraints” (198). [...] Landow argues, in effect, that hypertext de-naturalizes our ideas about authorship, authorial property, and texts as objects, and forces us to notice that those ideas are products of a specific historical period with a specific kind of technology.” (Gaggi 1997 s. 107)

Tekstene/nodene kan enten framstilles visuelt ved siden av hverandre (“tiled”) eller over hverandre (“stacked”). Hypertekststrukturen er topologisk (Kuhlen 1991, kap. 5), med komponenter spredt ut romlig i stedet for på linje. Klikking på forskjellige steder på skjermen og skrolling i forskjellige retninger gir mulighet for “topografisk” lesing (Saemmer og Tréhondart 2017 s. 176).

Hypertekster er “ikke-lineære” ved at tekstbitene kan leses i forskjellige rekkefølger; til forskjell fra f.eks. en vanlig roman der kapitlene kommer lineært etter hverandre:



(figuren er basert på Mallender 1999 s. 4)

Linker kan opprette “content relations, such as similarity, synthesis, causality, and elaboration.” (Kircz og Weel 2013 s. 138). Linkenes struktur utgjør et spor av en diskursiv strategi (Münker og Roesler 1997 s. 326). Forholdet mellom nodene kan inngå i en rekke logikker, f.eks. slik at link-overgangene fungerer som konjunksjoner, f.eks. “og”, “men”, “derfor” eller “likevel” (Simanowski 2002 s. 78). “Linkenes struktur er et spor, et avtrykk av en diskursiv strategi.” (Simanowski 2002 s. 78)

“The reader can select any such word and open it to reveal the second paragraph. This might seem to be nothing more than an automated version of the footnote that has been used in printed books for centuries. But there is an important distinction. The second paragraph also contains boldfaced words that open onto other paragraphs. The process of reference can continue indefinitely in the computer, as it cannot do with footnotes in a printed book. A hypertext is organized as a web of related textual elements: the author creates the elements and defines their relations and then hands the structure to the reader. Effective reading can only be done on the computer screen, because only the computer can handle the links between elements and take the reader effortlessly to the next text. The computer as hypertext constitutes a new writing space” (Tuman 1992 s. 20).

“In a book it would be intolerable to encounter footnotes to footnotes. But in the computer, writing in layers is both possible and tolerable, and reading a multi-layered text is effortless.” (Snyder 1997 s. 16)

Å opprette en link mellom to tekster innebærer en oppfatning og tolkning av hvordan de to tekstene henger sammen (Saemmer 2014 s. 37) “A thoughtful hyperreader asks why links are made from certain points and not others; where those links lead; and what values are entailed in such decisions. But beyond this,

links *create* significations themselves: they are not simply the neutral medium of passing from point A to point B (Burbules 1996).” (Snyder 1998 s. 110)

“The sense of a contemplative permanence is supplanted by a dynamic, volatile “superabundance of possibilities” (ifølge Michael R. Heim; her sitert fra Gaggi 1997 s. 114).

Noen journalister kobler gjennom linker sammen to eller flere tekster som har svært forskjellige synspunkter på samme sak, uten å ta direkte stilling til hva som er det beste perspektivet eller sannheten om saken. Dermed blir leseren holdt på en viss avstand til en sak, men også utsatt for det usikre ved mange saker (Saemmer 2014 s. 37).

“By permitting one to make connections between texts and text and images so easily, the electronic link encourages one to think in terms of connections. [...] As Terence Harpold has pointed out, most writers on hypertext concentrate on the link, but all links simultaneously both bridge and maintain separation.” (Lunenfeld 2000 s. 159)

“Instead of asking ‘why isn’t this text coherent?’, the hypertextual reader is more likely to ask ‘how could this be coherent?’ By placing so much emphasis on the inferential properties of each link, hypertext encourages a style of reading which elevates the importance of lexical-level connections over global conceptual continuity. [...] Because hyperlinking relies on common ground and pragmatic cooperation to the degree that it does, readers all over the world are likely to adopt increasingly similar strategies when both reading and writing hypertexts.” (Jukka Tyrkkö i <https://www.tandfonline.com/doi/full/10.1080/13825570701452722>; lesedato 07.08.19)

Ted Nelson beskrev i boka *Dream Machines* (1974) planlagt praktisk bruk av hypertext og hypermedia (Zimmer 2000 s. 307). Nelsons prosjekt kalt Xanadu (oppkalt etter et drømmerike i et dikt av Coleridge) skulle bli et “dokuvers”, og ha mange av de funksjonene som Verdensveven senere fikk. “[D]igital writing turns the private solitude of reflective reading and writing into a public network where the personal symbolic framework needed for authorship is threatened by linkage with the total textuality of human expression” (Michael Heim sitert fra Klepper, Mayer og Schneck 1996 s. 76).

Nelson ”skapade termen hypertext, men var också mannen bakom det väldiga Project Xanadu, ett försök att skapa en global databas av verk länkade till varandra. [...] För Nelson är problemet med den traditionella tryckkulturen att den inte kan återge det mänskliga tänkandet. I skriftens och tryckprodukternas natur ligger att de tvingar på läsaren en viss given sekvens. Därför kan den inte göra rättvisa åt den väv av idéer och associationer som alltid finns i ett resonemang eller ett konstverk. Hypertexten och Project Xanadu är Nelsons försök att komma till rätta med

problemet.” (Johan Svedjedal i [http://www.littvet.uu.se/digitalAssets/85/85075\\_3\\_densistaboken.pdf](http://www.littvet.uu.se/digitalAssets/85/85075_3_densistaboken.pdf); lesedato 30.09.16) Xanadu skulle bli et “dokuvers” – “ett ändlöst collage av textbitar som är ömsesidigt länkade till varandra”.

Tekstene rommer, på andre måter enn papirtekster, mange nivåer, kryssforbindelser og raske utvekslingsmuligheter mellom forfatter og leser (Klepper, Mayer og Schneck 1996 s. 85). “There is no one linear path through the work. The experience of reading such a text is more like consulting a map, or looking at a painting or photograph, than reading a book.” (Howard S. Becker sitert fra Hautzinger 1999 s. 58) “Anarchy is characteristic of hypertext; being nonhierarchical and multi-directional, hypertext at least has the *appearance* of having no order.” (Purves 1998 s. viii) Leseren kan enklere i en bok foreta “en assosiativ ekspandering til alle sider” (Suter 1999 s. 25)

“The increased “freedom” of hypertext is, in fact, illusory because the reader’s goals and tasks have already been written in part by both social and technological forces.” (Johnson-Eilola 1997 s. 39) “[A]lthough many hypertext theorists from the composition and literature disciplines assert a hypertext that displays openness, multiplicity, blurring roles, and other postmodern tendencies, that very fragmentation and sliding control are shaped by the forces of (disorganized) capitalist production and marketing.” (Johnson-Eilola 1997 s. 132)

Tittelsida fungerer vanligvis som “navigasjonssentral” (McKelvey 1999 s. 22). Det kan refereres i papirtekster, men ved linking er det mulighet for et øyeblikkelig sprang som neppe tilsvarer noe i papirmediet. Dette kaller Suter for “konkret intertekstualitet” (1999 s. 152). “Det maskinlesbare data-universet utvendiggjør intertekstualitet-prinsippet.” (Suter 1999 s. 43) Det er ingen fysisk avstand mellom de forskjellige dokumentene. Begreper som sentrum, periferi, hierarki og linearitet er i prinsippet irrelevante, og skal erstattes av multi-linearitet, nettverk, knutepunkter og koblinger (Klepper, Mayer og Schneck 1996 s. 70).

“Landingssiden er den første siden brukeren kommer til på nettstedet ditt. Det er ikke nødvendigvis åpningssiden eller startsiden.” (Riel, Fowler og Downes 2011 s. 267)

“Books, stories, poems, essays, or articles may no longer be conceived of as primary units, more or less complete and self-sufficient statements of one kind or another. Instead there will simply be a textual network that one enters, through which one moves, and from which one exits, after pursuing whatever purposes one has or learning whatever one is trying to learn. As the system grows and as individuals become more habituated to working with hypertext, the sense of centrality of certain primary texts within the network will be weakened. The distinction between text and context will dissolve and intertextuality will cease to be regarded as such because there will be, in fact, only one text, one intertext, one hypertext. “Hypertext … emphasizes that the marginal has as much to offer as does

the central, in part because hypertext [redefines] the central by refusing to grant centrality to anything, to any lexia [node], for more than the time a gaze rests upon it” (Landow, 69-70).” (Gaggi 1997 s. 103)

I hypertekster med mange noder vil ofte teksten i hver node gi god mening for seg uten å henge tydelig sammen med andre, fordi nodene skal kunne leses i mange rekkefølger. Det vil da dreie seg om en slags *asynDETisk stil* på nodenivå. Leseren skal ikke måtte huske mye fra tidligere noder – det skal være såkalt “low cognitive load”. Kunnskap oppstår gjennom “*nomadic centers*, provisional structures that are never permanent, always straying from one set of information to another” (Deleuze gjengitt etter Klepper, Mayer og Schneck 1996 s. 110). Hypertekst skal realisere drømmen om at det bare er å peke på et ord i en tekst, så dukker det straks opp en forklaring og tilleggsstoff; og i disse nye tekstene kan også alle ord pekes på (Bérard m.fl. 1993 s. 50).

Informasjonen blir stadig reorganisert av leser. Tekstene som inngår i en hypertekst, er snarere serielle enn sekvensielle, uten en på forhånd gitt retning å bevege seg i. “Hvis en statue av Michelangelo er det visuelle motstykket til en skrevet side, så ligner hyperteksten mer en mobile av Calder.” (Klepper, Mayer og Schneck 1996 s. 111) Begynnelse og slutt, framgrunn og bakgrunn, indre og ytre styres av “kinetisk energi” og “koreografisk retorikk” (Klepper, Mayer og Schneck 1996 s. 120).

Espen Aarseth skiller mellom “tekstoner” (“textons”) og “skriptoner” (“scriptons”). En liten mengde tekstoner kan kombineres til enorme mengder skriptoner (gjengitt fra Suter 1999 s. 65). Aarseth opererer altså med “two units: the *texton* and the *scripton*. A texton is an arbitrarily-sized segment of static text, and a scripton is a permutation of a (sub)set of textons. For example, each word of a fridge magnet poetry set is a texton which can be arranged to create millions of viable scriptons. In contrast, the entirety of *Moby Dick* [dvs. hele Melvilles roman], being a contiguous story, is both one texton *and* one scripton.” (Dorian Taylor i <https://contentsmagazine.com/articles/no-longer-no-sense-of-an-ending/>; lesedato 07.08.19) Det skiller altså mellom “*scriptons* (text strings as they appear to readers), *textons* (text strings as they exist in the text), and *traversal functions* (the mechanism by which scriptons are revealed or generated from textons).” (Noah Wardrup-Fruin i <https://games.soe.ucsc.edu/sites/default/files/nwf-BC3-reading-DigitalLiterature.pdf>; lesedato 26.09.19)

“Aarseth explains his tentative “textonomy” in terms of *scriptons*, *textons*, and a *traversal function*. Scriptons are strings of signs (information) “as they appear to readers”; textons are strings of signs “as they exist in the text”; and the traversal function is “the mechanism by which scriptons are revealed or generated from textons and presented to the user of the text” (62). Built on these neologisms, Aarseth’s seven-term typology includes the following modes of traversal (together, their variables make possible 576 unique combinations or “media positions” (64):

1. Dynamics: the *fixity*, *variability*, or *unavailability* of scriptons;
2. Determinability: A *determinate* text has the same scriptons each time; the scriptons adjacent to any other scripton vary in an *indeterminate* text;
3. Transiency: The passage of time triggers the appearance of scriptons in a *transient* text (alt. *intransient*);
4. Perspective: If the user has a character in the world, the perspective is *personal* (alt. *impersonal*);
5. Access: If all scriptons are accessible at all times, as in a codex, the access is *random* (alt. *controlled*);
6. Linking: *Explicit, conditional, none*;
7. User Functions: *explorative* (forking), *configurative* (scriptons are created or chosen), *interpretive* (hermeneutic), *textonic* (able to write or program – extend or change text)” (<http://www.earthwidemoth.com/blog/2006/11/14/aarseth-cyber/>; lesedato 07.08.19)

Hypertekstforfatteren kan i en viss forstand sies å overskride setnings- og tektnivået på det som Roman Jakobson kaller kombinasjonsaksen. Enhver språkbruker velger på seleksjonsaksen fonemer som blir til ord og ord som blir til setninger og tekster på kombinasjonsaksen. En tekst er øverste nivå, men hypertekstskriveren kan kombinere egne og andres tekster til en ny og mer omfattende tekst. På Verdensveven ligger det en enorm mengde tekster som hvem som helst kan koble sammen og slik skape en ny hypertekst. Jakobson har påpekt at valgfriheten øker oppover i hierarkiet fra fonem til tekst. At kombineringen av tekster og linkingen gjøres på den enkelte forfatters personlige, subjektivt bestemte måte, skaper imidlertid et dilemma. Aarseth mener at hypertekstforfatteren oftest gjennom sine node- og linkvalg faktisk begrenser leserens valgmuligheter, mens en leser av en bok derimot helt fritt på ethvert tidspunkt kan velge hvor i teksten hun vil lese (Aarseth 1997a s. 77-79). Det er påfallende at Bolter i en oversikt over interaktive muligheter bruker uttrykket “[r]eaders may be allowed to [...]” (Bolter 1991 s. 122). Frihet er dessuten kulturelt avgrenset ut fra hva som forventes av en leser (Johnson-Eilola 1997 s. 70).

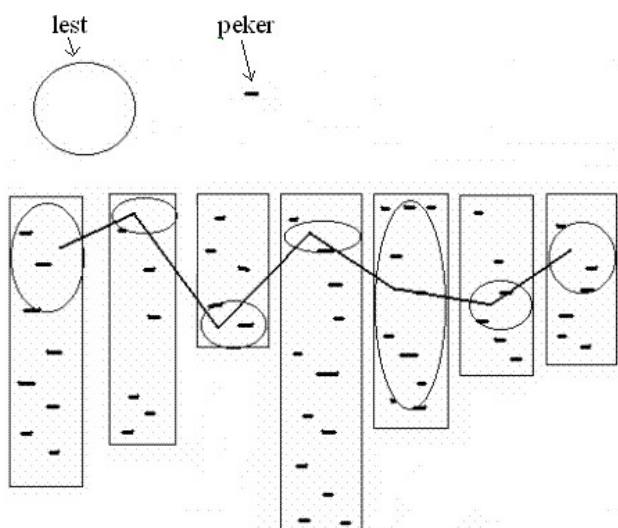
Det har blitt hevdet at linkene “tynger” tekstene uansett om leseren klikker på dem eller ikke, fordi leseren må ta stilling til om de skal klikkes på (Alain Giffart i <https://bbf.enssib.fr/consulter/bbf-2011-05-0071-013>; lesedato 11.09.23).

Leseren skal ikke bare oppfatte/lese tekstinnehodlet, men også tekststrukturen eller tekstoprganiseringen, og denne er ofte langt mer komplisert enn i papirtekster

(Runkehl, Schlobinski og Siever 1998 s. 161). Leseren blir en “bibliotekar” som skaper intellektuelle forbindelser (Arot, Bertrand, m.fl. 2011 s. 60).

En link kan være enten eksplisitt, skjult, betinget eller tilfeldig (Jean Clément i [https://www.persee.fr/doc/litt\\_0047-4800\\_1994\\_num\\_96\\_4\\_2350](https://www.persee.fr/doc/litt_0047-4800_1994_num_96_4_2350); lesedato 24. 10.19). En betinget link er kun klikkbar på visse betingelser, f.eks. at bestemte deler av teksten er lest først eller et spørsmål riktig besvart. Betingete linker kalles også “guard links” (Simanowski 2002 s. 80).

Ved enhver link har leseren valget mellom “ja”, “nei” eller “senere” (Suter 1999 s. 144). Når en leser hypertekster, er det mer vanlig å hoppe mellom dokumentene enn i en del papirtekster.



Teksten kan framstå som en samling alternative tekstinnledninger (Münker og Roesler 1997 s. 319-320).

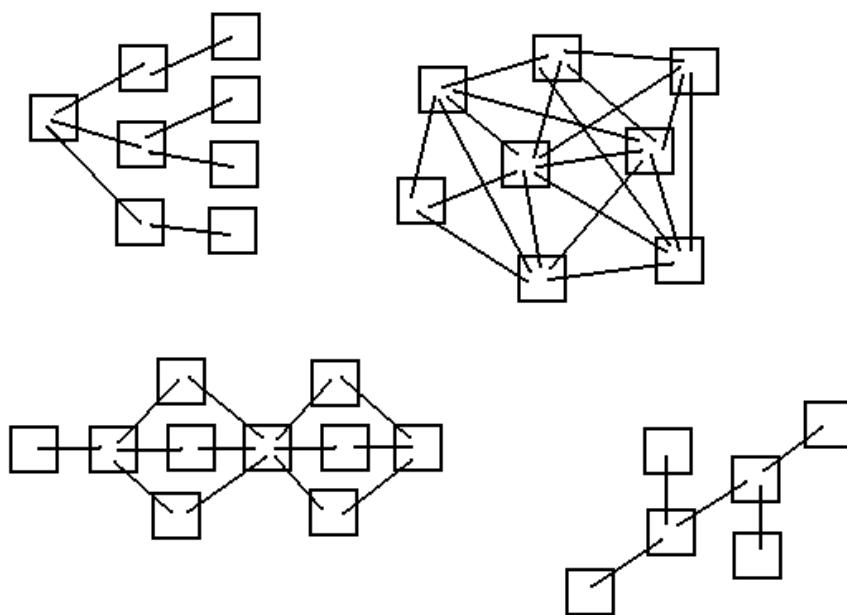
“Bernd Wingert noted a possible shift of attention in the reading of hypertext from the text to the actual click, which he correctly characterizes as the “zentrifugalen Kräfte” (Wingert 1996, 202). That is, readers are more interested in where the links take them than in what they actually see on the screen. And so to a certain extent one can rightly speak of a hypertextual “zap mentality.”” (Block, Heibach og Wenz 2004 s. 281)

“[I]n digital works that permit the reader to find his or her own pathway through the work it is often difficult to tell when one has “read” the work completely. This is problematic both for instructional works and for communication among scholars, though for different reasons.” (Lynch 2001) Noen hypertekster er kjennetegnet av det som kan kalles “forteksting” (à la “fortetting”): Svært mange pekere i den løpende (brød-)teksten, og alle gir leseren mulighet til å bevege seg bort fra det stedet hun for øyeblikket leser.

“Eit vanleg uttrykk innanfor nettformgjeving er “tre klikk og du er død”. Det vil seie at om det tek brukarane meir enn tre klikk å finne interessant informasjon, vil dei gå lei og gje opp.” (Riel, Fowler og Downes 2011 s. 214)

Det trengs tydelig markering av hva som er pekere “since users will otherwise be reduced to playing mine sweeper with the mouse to discover the active areas of the screen” (Jakob Nielsen, sitert fra Gerdts 1997 s. 24). Det kan også tenkes motsatt, at det ikke bør markeres noen pekere for ikke å distrahere leseren; hvis leseren vil ha ytterligere informasjon og derfor ønsker at et ord eller et bilde skal være peker, så får leseren undersøke om så er tilfelle.

Nodene som utgjør en hypertekst kan være organisert på mange ulike måter, f.eks. disse måtene:



Det at programvaren kan lagre adressen til alle virtuelle steder som en leser har vært innom, utgjør en protokoll over personens “lesereise” (Gräf og Krajewki 1997 s. 72).

Nodene i modellen øverst til høyre ovenfor danner et nettverk eller rhizom. En rhizom har verken sentrum eller periferi fordi alle ganger i labyrinten kan være forbundet med alle de andre gangene, og det er en labrint uten utgang (Huyssen og Scherpe 1986 s. 262). Mangfoldet kan bli lammende (Klepper, Mayer og Schneck 1996 s. 19). Det kan bli en “kombinatorisk eksplosjon” i antall koblinger mellom dokumentene (Nusser 1989 s. 152). Tekstens “clickability” må kombineres med leserens mentale “switchability” (Münker og Roesler 1997 s. 330).

Korte lydsignaler – såkalte “earcons” – kan bidra til å orientere leseren og gi signaler om tekststruktur, teksthendelser osv. (Bollmann og Heibach 1998 s. 390).

“As the turns become more frequent and the digressions more vigorous, the user risks becoming *lost* in the docuverse. (172)” (Silvio Gaggi og Michael R. Heim i Gaggi 1997 s. 105)

Nyhetsformidleren *Total News* fikk i 1999 forbud mot å la *Washington Posts* nettstoff dukke opp i en skjermramme på *Total News'* nettsider (Giraudel 1999). Redaksjonen for *Total News* hadde fått stoffet til å se ut som om det var egenprodusert. Slik bruk av skjermrammer ble altså forbudt, men *Total News* kunne uten videre legge linker direkte til *Washington Posts* nettsider og slik lede sine lesere dit. Også slik linking kan av noen oppleves som uheldig. Derfor har det blitt foreslått innføring av en ny logo som alle kan plassere på sin egen nettside hvis de ønsker at ingen skal linke til den (Giraudel 1999).

Det ble på slutten av 1990-tallet hevdet at hypertext hjelper oss å sette store mengder informasjonsbrokker i sammenheng med hverandre, og dermed f.eks. gjør det lettere å oppdage det mangfoldet av grunner som kan forårsake en effekt (Gabriel 1997 s. 164). For leseren skal alle koblingene drive fram oppdagelser og nye ideer (Klepper, Mayer og Schneck 1996 s. 92). Den tyske informatikk-professoren Rainer Kuhlen er en av mange som har hevdet at hypertext-organisering av stoff kan fremme multiperspektivisk tenkning (Kuhlen, 1991, kap. 6). Mest kjent er teoriene til George P. Landow. Hypertext ble for Landow og andre nærmest en ideologi, påvirket av Roland Barthes' og Jacques Derridas tekstsyn (om utspredning/disseminasjon m.m.) med et påstått enormt pedagogisk potensial. Hypertext egner seg til å vise fram meningsstrukturer der det ikke finnes noen overordnet sannhet. Strukturen understøtter derimot begrensete og subjektive innsikter (Klepper, Mayer og Schneck 1996 s. 108-109). Landow oppfatter leseren av hypertext som et suverent subjekt. Han dekonstruerer forfatteren, slik Roland Barthes og andre dekonstruerte leseren (Klepper, Mayer og Schneck 1996 s. 74-75).

“A number of hypertext theorists, including Landow (1992), Bolter (1991), Lanham (1993) and Johnson-Eilola (1994), agree that the parallels between hypertext technology and postmodern theory are so strong that the two fields have ‘converged’ (Landow 1992, p. 3). Bolter finds it ‘uncanny’ that many of those postmodern pronouncements which scandalised print-bound readers seem no more than descriptive of the properties of computer-generated hypertext. [...] More than any previous text technology, argues Johnson-Eilola, hypertext ‘encourages both writers and readers ... to confront and work consciously and concretely with deconstruction, intertextuality, the decentring of the author, and the reader’s complicity with the construction of the text’ (1993, p. 382).” (Snyder 1998 s. 134)

Hypertext “strive to mimic the brain’s ability to make associative references and use these references in order to access information. Hypertext fuses the reader and writer in a visible, surface-level manner that emphasizes the very qualities – the play of signs, intertextuality, the lack of closure – posed as the ultimate limitations of literature and language by the theory of deconstruction.” (Paul 2015 s. 190)

“Hypertext, its postmodern adherents argue, makes tangible many of deconstruction’s provocative claims. But unlike print, the technology on which Derrida focused most of his attention, hypertext “takes us beyond the paradox of deconstruction” (Bolter, 1991b, p. 166), “creates an almost embarrassingly literal embodiment of [Derridean de-centering and Barthesian writerly texts]” (Landow & Delany, 1990, p. 6), and provides “true freedom from the tyranny of the line” (Coover, 1992, p. 23). The normal hierarchical arrangement of reading time regulating spatial movement becomes inverted in this articulation of postmodern space, with space portioning out time, regulating time. Thinking about hypertext in this way, readers are no longer reliant on the writer to lead them temporally from border to border in the span of a tale; readers walk around, deconstruct and build, move over and under, exterior and interior. As Baudrillard might say, the death of the book is a simulated assassination, a method by which the text comes to subvert anxieties about the limitations of the culture of the book – an ideology that traditionally works by “suppressing the processes and conditions of the production of literary texts... helping to create a world of autonomous subjects who ‘work by themselves’ in subjection to the existing social formation” (Belsey, 1980, p. 128). In this apparent subversion of print, the fluid, open nature of hypertext (the attributes that seem the most in opposition to print text) may actually be even more conservative than other media, which can not as easily subsume critique and resistance. By partly naming its inadequacies, an ideology may be able to “tighten rather than loosen its grip” with a self-deprecating honesty that appears to acknowledge its own flaws by showing a “limited degree of ironic self-awareness” that can mask and/or subvert important struggles” (Johnson-Eilola 1997 s. 135-136).

“It is not merely isolated, concrete technological objects that enforce conventional ways of reading books, but society – books are machines for transmitting authority and disseminations of cultural capital. Dismantling the technology of the print book does not necessarily remove the social forces that articulated the classic book text. Hypertext might be capable of orchestrating the reader and writer movement more effectively than a print text in some cases, [...] when the new medium is taken to be an automatic, hands-off deconstruction of itself that does not require the reader to engage in the mental struggles normally required to deconstruct a print text. The space of hypertext constructed here may offer a vista, a way of accumulating both time and space [...]. But by constructing a less totalizing text (building a place encouraging deconstruction and dispersal, a free play of meaning) hypertext may end by affording only a postmodernist forum in which everything (writer, reader, society) becomes simultaneously totalized and fragmented, simulated on the

computer screen and in magnetic memory. We should not be surprised at this condensation of agents, objects, and subjects: The collapse of subject, method, object, and interpretation is immanent from a poststructuralist standpoint (Tompkins, 1988); in the eyes of some postmodern theorists, hypertext accelerates this tendency. The theoretical flattening of textual identity is not an innocent construction on the part of theorists.” (Johnson-Eilola 1997 s. 136-137)

“The new publishing resembles more the modern megapolis, which is often described as a concrete jungle, a maze of activities and hidden byways, with no apparent center or guiding steeple. This is the architectural equivalent of the absence of the philosophical and religious absolute. (221)” (Michael R. Heim i Gaggi 1997 s. 104)

“Because hypertext easily accommodates interdisciplinary approaches to literary studies, teachers can use it to develop and extend their students’ ability to think critically and make connections between discrete bodies of information. The electronic facility to make such connections speeds up the development of skilled reading and creative thinking. [...] Hypertext enables students to assimilate large bodies of information while simultaneously developing those analytic habits they need for thinking critically about the information.” (Snyder 1998 s. 135-136)

“We sometimes talk as if the goal of electronic writing is to set the reader free from all arbitrary fixity and stability of the print culture. In fact, hypertext simply entangles the reader in nets (or networks) of a different order. Readers are tempted to believe themselves free of all control, only to be caught by two kinds of constraints – the constraints of the computer system and the constraints of the writing system the computer embodies.” (Tuman 1992 s. 60)

“[D]e digitale mediene åpner for en radikalt annen lesemåte enn den fordypende lesningen. [...] I en fordypende lesning overgir leseren seg til forfatterens refleksjon – leseren fortrenger sitt behov for å hevde seg selv til fordel for å la den andre fullføre sitt resonnement. I den nye lesemåten er det derimot leserens innfall og tankespring som regjerer. I en slik lesning velger vi bort det som yter motstand, slik som lange tekster med fremmede perspektiver og innfløkte argumenter. Disse tekstene mangler dessuten sosial status om de ikke er anbefalt av noen vi følger eller er venner med via såkalt sosiale medier.” (Odd Gaare i *Aftenposten Innsikt* november 2010 s. 75)

“Several studies have shown that, contrary to the claims of early hypertext enthusiasts such as George Landow, hyperlinks tend to degrade comprehension rather than enhance it. The following studies, cited by Carr in *The Shallows*, demonstrate the trend. Erping Zhu, coordinator of instructional development at the Center for Research on Learning and Teaching at the University of Michigan, had test subjects read the same online passage but varied the number of links. As the number of links increased, comprehension declined, as measured by writing a

summary and completing a multiple-choice test. Similar results were found by two Canadian scholars, David S. Miall and Teresa Dobson, who asked seventy people to read Elizabeth Bowen's short story "The Demon Lover." One group read it in a linear version, and a second group with links. The first group outperformed the second on comprehension and grasp of the story's plot; it also reported liking the story more than the second group. We may object that a print story would of course be best understood in a printlike linear mode; other evidence, however, indicates that a similar pattern obtains for digital-born material. D. S. Niederhauser, R. E. Reynolds, D. J. Salmen, and P. Skolmoski had test subjects read two online articles, one arguing that "knowledge is objective," and the other that "knowledge is relative." Each article had links allowing readers to click between them. The researchers found that those who used the links, far from gaining a richer sense of the merits and limitations of the two positions, understood them less well than readers who chose to read the two in linear fashion. Comparable evidence was found in a review of thirty-eight experiments on hypertext reading by Diana DeStefano and Jo-Anne LeFevre, psychologists with the Centre for Applied Cognitive Research at Canada's Carleton University. Carr summarizes their results, explaining that in general the evidence did not support the claim that hypertext led to "an enriched experience of the text" (qtd. in Carr 129). One of their conclusions was that "increased demands of decision-making and visual processing in hypertext impaired reading performance," especially in relation to "traditional print presentation" (qtd. in Carr 129)." (Hayles 2010)

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