

Digital Fiction: The Future of the Book?

[Sheffield International Artist's Book Prize Catalogue](#)

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What is the future of the book in a world saturated with digital media that allow us to read, watch, listen and play from a variety computational devices and mobile technologies? Has the age of print come to an end, or do we need to rethink the idea of the book as a form of publishing tied up with print technologies?

There is no doubt that digital technologies offer writers and programmers a whole array of tools with which they can build narratives, many of which were, until the digital revolution, unavailable to authors working in print. Writing with new media allows writers to experiment with novel and alternative forms of expression. Digital hypertext provides a linking structure within which chunks of digital text can be connected in linear and multilinear configurations; new media allows sound, image, film, animation, and code to be incorporated into digital works; the Web 2.0 and social media allow users to easily, and with relatively little technical training, generate their own digital content. Whether in terms of structure and navigation or in terms of modes and media, digital technologies are bound to transform writers' and readers' traditional ideas about 'text', 'textuality', 'literature', and 'reading'.

Emerging from these new creative possibilities is 'digital fiction'. Written for and read from a computer, its structure, form, and meaning are dictated by the digital context in which it is produced and received. Rather than existing as a digital version of a print text, digital literature is 'born digital' meaning it would lose something if it were removed from the medium. It often contains hyperlinks, mini-games and other interactive elements, moving images, or sound effects, and the texts require that the reader interacts with them by using the hardware and software of PCs, tablets, smartphones and other digital devices.

This article traces the historical development of digital fiction from its experimental print precursors through to pre-Internet text-based forms and current web- and app-based incarnations. It shows ways in which literary experimentation has evolved along with technology and makes some speculative suggestions about the future of the book.

Pre-Digital Digital

The literary experiments of digital fiction are in some respects nothing new. In fact, some print works retrospectively collected under the term 'proto-hypertext' are seen as the literary precursors of digital fiction. As if anticipating, or perhaps willing-on, the creation of digital hypertext which would come later, proto-hypertexts are fragmented and can be read in different orders so that, as in a digital hypertext, the reader is allotted some responsibility for choosing in which order to read the text. Published largely in the 1960s, they were part of a general postmodernist response to the perception that conventional modes of fiction had been exhausted, and a move towards deconstructing traditional literary forms and subverting common expectations of what a novel or poem should look like.



Raymond Queneau's *Cent Mille Millards de Poèmes* ("Queneau Sonnets" by Thomas Guest, <https://www.flickr.com/photos/thomasguest/3597995774/>, licenced under CC-BY 2.0)

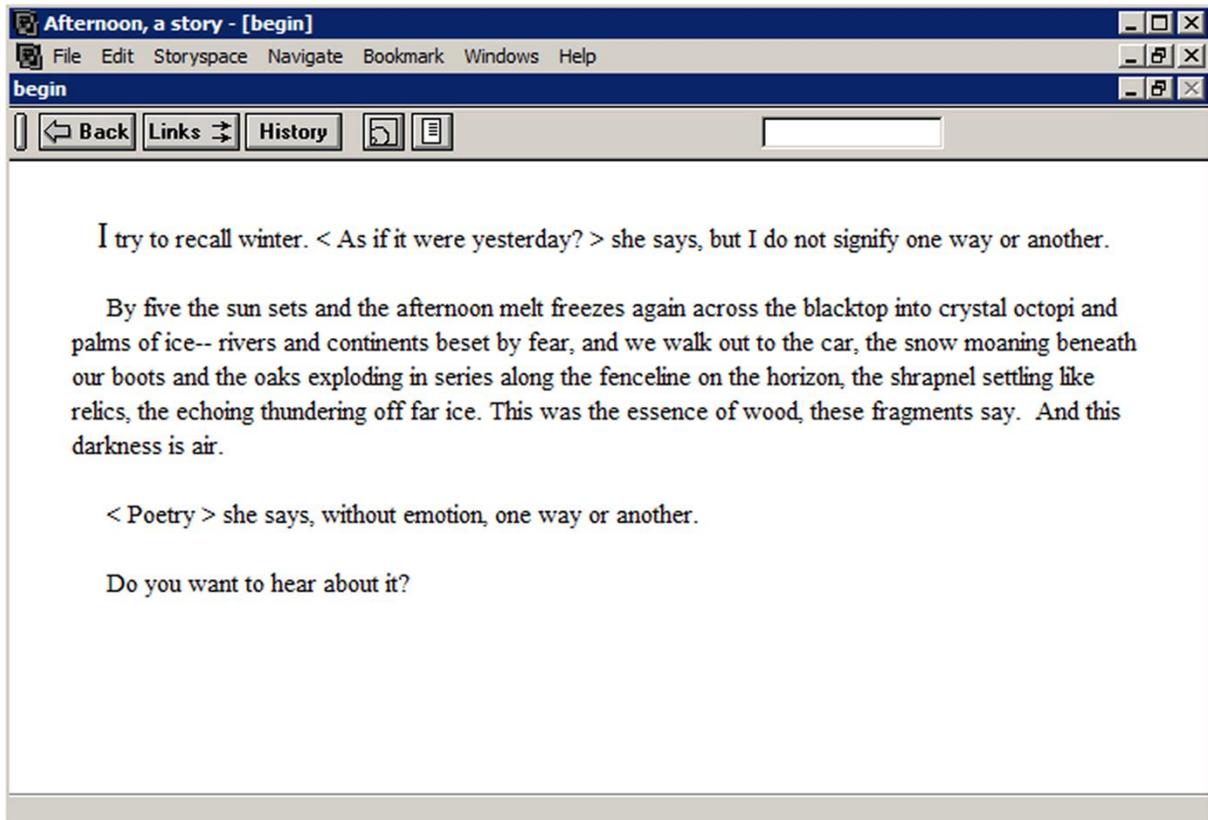
Raymond Queneau's *A Hundred Thousand Billion Poems*, published in 1961, is published in a bound book, but exists as a collection of individual lines from 10 sonnets, cut into card strips that the reader can combine and re-combine indefinitely to arrive at diverse versions of the poem. As indicated by the title of the work, there are, in theory, one hundred thousand billion (10^{14} or 100,000,000,000,000) different poems in this text. Marc Saporta's (1963) *Composition No. 1* and B.S. Johnson's (1969) *The Unfortunates* are both examples of 'books-in-a-box' which exist as collections of loose leaves or individual pamphlets that can be shuffled and read in any order.

Digital Literary Pioneers

With the advent of digital technology in the 1970s and 1980s came a new tool kit for writers which allowed them to add forms of interactivity not available in print. Interactive fictions,

also called text adventures, were a highly popular type of interactive reading game on early PCs. To read them, players have to enter text commands like 'go north' or 'open door' in response to narrative sequences simulating an interactive, exploratory storyworld. In other words, individual reading paths depend on the reader's choices and interactive creativity while in dialogue with the computer. Infocom's (1980) *Zork* trilogy is perhaps the best known, and also one of the first, interactive fictions but there is still a very active interactive fiction writing and reading scene today although, compared to commercial videogaming, it has become a niche phenomenon.

With a view to exploring and experimenting with emergent forms of digital writing, in the late 1980s, J. David Bolter and Michael Joyce created the Storyspace software programme for writing and reading hypertext fiction. This pre-Web technology was developed to allow authors to connect fragments of text, known as 'lexias', via hyperlinks and thus play with literary structure, narrative and form. During reading, each lexia is displayed individually and rather than the numeric sequencing that is associated with most print novels, lexias have titles. Readers have to click on hyperlinks that provide access to other lexias within the text. Unlike in informational hypertext (such as standard web pages), however, where the linked term is more often than not suggestive of what the reader will find at the destination, the linked term in a hypertext fiction might not always directly indicate what will be found when it is clicked. Hypertext authors were experimenting with new forms of textuality, attempting to produce fragmented, multilinear, three-dimensional shaped texts which they perceived as more faithfully representing human subjectivity and thought than traditional linear narratives. The reading experience is therefore disjointed, exploratory and open-ended.

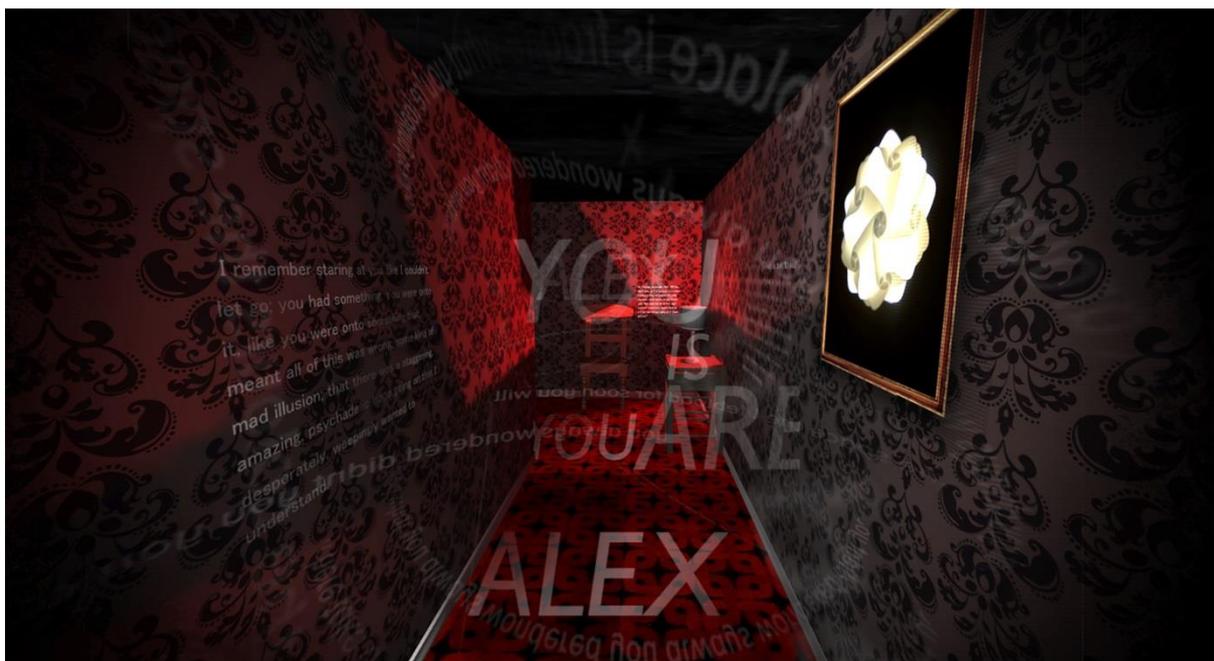


**Screenshot of Michael Joyce's Storyspace hypertext fiction, *afternoon, a story*.
Reproduced with permission from Eastgate Systems Inc.**

Michael Joyce's (1990) *afternoon, a story* is probably the best-known hypertext fiction. Set in modern-day America, the narrative revolves around four central characters whose lives are, like the structure of the text, intertwined in complex ways. The text pivots around a number of key incidents of which the most influential is a car accident in which Lisa, Peter's ex-wife, and Andrew, his son, may have been involved. The text houses many unresolved mysteries and utilises the hypertext structure to emphasise its narrative ambiguities. Readers often describe a feeling of disorientation as opposed to any perceived empowerment that the choice of links might imply. Approximately thirty Storyspace hypertext fiction works have been published to date. Eastgate Systems Inc. is the sole producer, publisher, and distributor of Storyspace hypertext fiction worldwide but as fewer computers are built with CD-ROM drives, reading hypertext fiction on CD-ROM is likely to become obsolete. And indeed, most hypertext fictions written today are web-based and freely accessible.

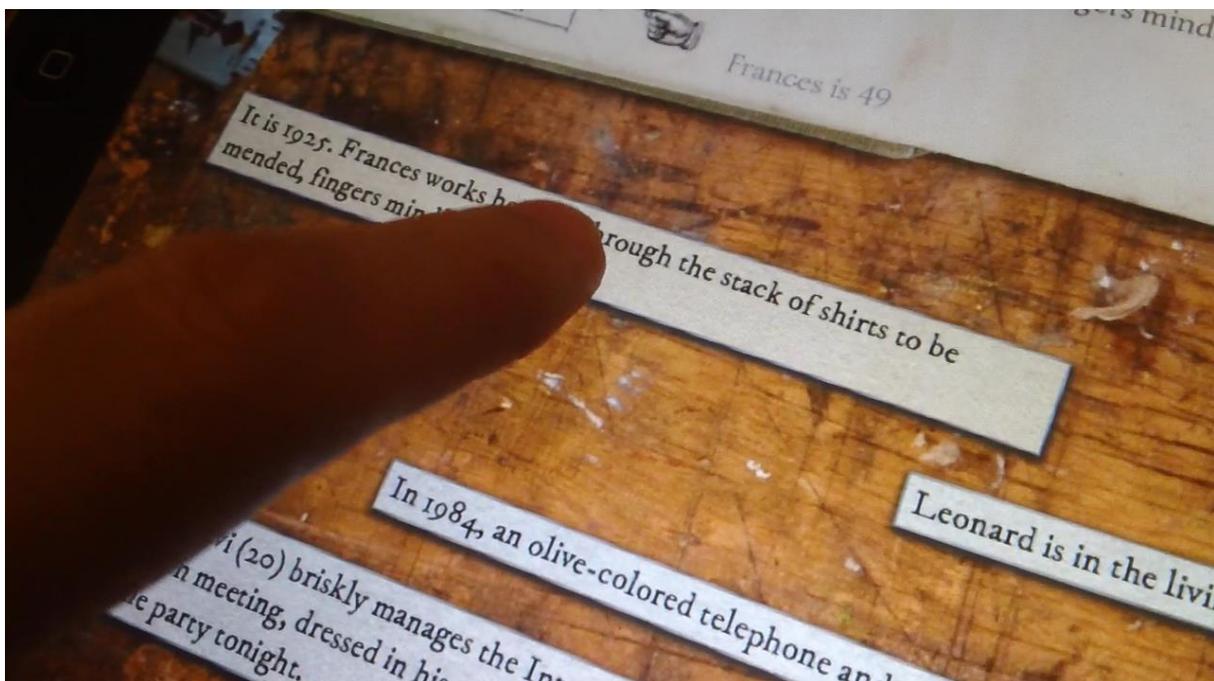
Contemporary Digital Fiction: Web-Based Fiction, App-Fiction, and Social Media Fiction

Since the birth of the Web in the 1990s, writers have been able to house their works within an entire network of interconnected material and also supplement the interactivity of pre-web digital creativity with multimodal content. This has led to texts such as *10:01* by Lance Olsen and Tim Guthrie (2005) utilising hyperlinks that reach out from the fiction to external, extra-fictional websites to tell the story and works such as *Nightingale's Playground* by Andy Campbell and Judy Alston (2010) and *The Path* by Tale of Tales (2009) utilising the 3D capacity of Web-based technology to immerse readers in their works. Other works call attention to the reader's role in the narrative by emphasising their kinetic interaction with digital fiction. *Loss of Grasp* by Serge Bouchardon and Vincent Volckaert (2010) features a character who feels like he is losing control of his relationships, his work, and his sense of self. At the same time, his loss of grasp mirrors the reader's experience of this interactive digital work as they struggle to stay in control of the text and the components that comprise it. The text combines kinetic text, colourful images, speech, sound effects, and moving images. It also asks the reader to use pronounced physical movements to advance the narrative; they must click and hold the mouse button and/or make strong mouse strokes across the screen. Touch and physical gesture are therefore integral to this work. Oral storytelling, one of the oldest forms of narrative communication, is also embraced by digital writers. For example, Christine Wilks's (2010) *Underbelly* is an interactive story about a woman sculptor, carving on the site of a former colliery in the north of England, now landscaped into a country park. The work relies predominantly on oral narrative(s), but it also incorporates still and moving images, text, and film. Following the tradition of oral storytelling, it allows readers to listen to voices of real people telling their stories of working in local coal mines, thus combining a fictional narrative with authentic testimonies.



Screenshot of *Nightingale's Playground*, 'Consensus Trance II'. Reproduced with permission from Dreaming Methods.

Social-media sites epitomise the user-generated nature of contemporary digital content and writers have been quick to utilise their potential. Twitterfiction can take the form of a 'shorty' in which micro-stories are contained with a single tweet (e.g. Arjun Basu's @arjunbasu account) or longer serialised narratives which emerge over several tweets (e.g. David Mitchell's *The Right Sort* published on his @david_mitchell account). Utilising the interactive nature of Twitter more explicitly, 'A dreadful start' (@wnd_go) allows readers to choose alternative pathways through a story by tweeting to different @ accounts.



Reading *18 Cadence* on a tablet device. Reproduced with permission from Aaron Reed.

The widespread adoption of tablets and smartphones has led to hardware-specific literary experimentation in the form of 'app-fictions' which require readers to engage with the texts via the touchscreen of their mobile devices. Inkle studios have been instrumental in the app-fiction revolution, not least for developing their inkle writer platform which provides writers with the technology they need to develop their own app-based stories. Dave Morris's (2012) *Frankenstein* is an interactive novel that places the reader right inside the story, acting as Frankenstein's confidant, guide and conscience. Throughout the narrative readers are given choices reflecting how they would like Frankenstein to proceed, and they are allowed to explore the dark, mysterious world in which the original story is set. Aaron Reed's (2013) *18 Cadence* is an iPad storymaking platform that lets participants explore and compile the history of a fictional house from 1900 to the year 2000, dragging and combining fragments of story text to create their own narrative out of the raw material of a century of living. Like

magnetic fridge poetry for narrative, fingers push around sentences and shape individual events into meaningful sequences so that readers are invited to play with the atoms of a story, and consider the malleability of a history.

The Future?

History tells us that writers embrace new technologies and there is little to suggest that the future will be any different. At the same time, readers are being exposed to more and more methods of accessing digital content which will ultimately determine the future of digital fiction. We do not believe that the advent of the digital means the death of print. But we do see digital technologies allowing writers to push at the boundaries of experimentation into new media and to explore new forms of working with other artists with different sets of creative and technological expertise.

Biographies

Dr Alice Bell (Sheffield Hallam University, UK) and Professor Astrid Ensslin (Bangor University, UK) research digital fiction and have published widely in this area. They are Principal- and Co-Investigator of the Reading Digital Fiction project (funded by the Arts and Humanities Research Council) and the Engaging in Digital Fiction project (funded by Sheffield Hallam University's Higher Education Innovation Fund).