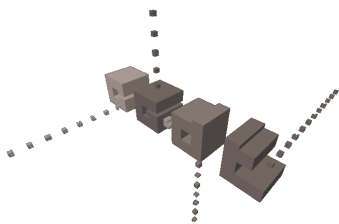


Computer Games & Digital Textualities

A collection of papers



IT University of Copenhagen
March 1st & 2nd 2001

A collection of papers

Presented at the first European conference on

Computer Games & Digital Textualities

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Collected & printed by
The Department of Digital Communication & Aesthetics.
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Reload - Yes/No. Clashing Times in Graphic Adventure Games

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Introducing: Time and Adventures

Why time and digital texts? After an early preoccupation with space, labyrinths, topological maps and the like, for two or three years now, time seems to be a favorite playground for those studying digital text. I think a pivotal text here is Michael Joyce's "Nonce Upon Some Times"¹⁶ where the revisitation and rereading of nodes in a hypertext was still conceptualized via spatial metaphors but nonetheless rooted in the temporality of the reader's sense-making endeavors. After all, the link not only connects distant pieces of text, it also defers parts of an ongoing text in time. Later papers, like Robert Kendall's "Time: The Final Frontier"¹⁷ (1999) or Marjorie Luesebrink's "Play On: Plot and Pause Points in Hypermedia Narrative"¹⁸ (2000) were concerned with pacing the reader's progress through this text, identifying techniques much like those used in alphanumeric text in order to give the impression of speed or slowness. Recently, the focus has shifted to the clashing of the "time zones" of the player and the game in digital text, as sketched by Espen Aarseth in his paper on "The Temporality of Ergodic Art"¹⁹. Common to these approaches is that they concede time's tendency to deposit in a linear, unidirectional progression - a limitation that may still determine hyperfiction but might be broken by games. In the following, I will try to situate graphic adventures in the tension of divergent times: functional time, relative time and (hypothetically) reversible time.

A theory of hypertext may appear lopsided when spatial or topological approaches to the labyrinthine text are not at least complemented with temporal ones - it's *space-time*, after all. Computer games seem far more straightforward: time is what passes while I solve all puzzles, complete all levels - which makes time as a parameter appear negligible. But in fact, especially adventure games have always been about time, from their subject matters (esp. time-travels) to functionalities like the reload-option and their treatment of time is more diverse and unsettling than that which we know from other narrative genres, namely book and film, but also hypertext. Computer games contain different, clashing concepts of time and thus accommodate a temporality that provides an adequate representation of a world shaped by modern physics.

Functional Time

For the internal workings of the computer, time is a crucial parameter: for multiplexing, video-indexing/timecoding, real-time-operations etc. Re-

member the Y2K-hysteria, caused by the realization of how many of our every-day appliances are controlled by microchips that rely on system time and might therefore be affected by the failure to compute "00" to equal "99+1". But while - unless at the start of a new millennium - it bears little or no semantic meaning whether a specific cash machine is or isn't working, for sound or video files, usually, if the timing changes, so does the information and thus the entire text. In computer games, events are triggered by if-then conditions as well as timers and here, too, timing can condition the semantics of the game.

Jesper Juul identifies the computer's capacity to keep pace as one distinctive feature of computer games²⁰. It is early or abstract games that use time mainly for its pace-keeping features. Arcade-style games often allot play-time during which certain tasks have to be fulfilled and from which highscores are calculated. If the time runs out, the game ends, no matter whether a sense of fulfillment or narrative closure is reached. Dropping a coin into an arcade game buys play-time, skilled performance wins the player even more time. Other games make time their key-target outright: in racing-games, what matters is how fast the player can complete a course. Early adventures, like Sierra's *Space Quest*- or *King's Quest*-series use time as tasks - playing against the clock on par with hand-eye-coordination-tasks, puzzles, virtual slot machines etc. This use of time seems to remain within a traditional understanding of time as a tool for measuring, but this appearance is broken in order to produce a clash of different concepts of time.

Typical for an adventure, *King's Quest III: The Heir is Human*²¹ asks the player to examine rooms, pick up items and combine them with each other as well as with other characters in the game. Plotwise, *King's Quest* is about young Gwydion, servant to magician Manannan who quite stereotypically runs away from his tyrant-master to gain his freedom, a wife and a kingdom. While Manannan is gone on business-trips (probably molesting some townspeople down in the valley), Gwydion finds the time to collect the items needed for his escape. In the early stage of the game, the player's endeavors are repeatedly interrupted by the return of the magician who punishes the boy for being lazy and poking around in his master's study, usually by sending him back to his own room, from whence the player has to get the figure back into the position where it was caught. The further down in the game, the more complex are the moves necessary to regain these positions.

Thus, the timer works as an admittedly tedious task within the game. But apart from complicating matters for the player, the interruptions and penalties also contribute to the story of the game: they illustrate the wizard's malignity, the boy's plight and his impetus to get away. While there is a traditional clash between player's and game time (Manannan is only ever gone for a couple of minutes before I get interrupted without this being commented upon in the narrative in the line of "while the boy had to work in human-time, the wizard could squeeze a day's job into only a couple of minutes"), this set-up also leads to a strange simultaneity of conceptually consecutive events in a way that could not be achieved by verbal visual narrative: the actions that contribute to the boy's getting away at the same time establish Manannan as an evil sorcerer, a menace not a benevolent teacher, and the initially random manipulation of spaces and objects congeals into a meaningful and directed action. *King's Quest III* has a lead-in that establishes both Manannan's evil character and Gwydion's wish to escape. Coincidentally, this lead-in is lost after it is first displayed. "Replay" in the game starts from the first interactive scene, somehow demoting this introduction to subsidiary information. In fact, most games I know rely on a narrative introduction of some sort in order to inform the player at least roughly about the aim of her quest. But the potential to merge problem-statement and problem-solving in the early stages of the game is there and can be found in games as conceptually different as *Space Quest I*²² or *The Neverhood*²³, where it creates a synchronicity of causally asynchronous events, a conflation of times.

Space Quest I, too, uses timing and timers, not least in the time-bomb plot that governs most of its second half. But *Space Quest I* also uses a unique cross-over between system-time and functional time that serves to destabilize the notion of event time even further than the "normal" divergence between the time a certain event takes and the time it takes to tell it. At one point in the game, space-hero Roger Wilco has to pass under a cave-ceiling dripping with acid. There may be other ways to solve this puzzle, but the most convenient one I found was to call up the menu-bar and toggle the speed option. In "fastest" mode, Wilco had no problem outrunning the deadly drops and could continue on his way unharmed. In other media, one would expect to encounter an event-time that diverges from "natural" time: a house is built within minutes, a stone drops in slow-motion etc. The relations between player's and game-time would be distorted, but fixed. An instability could only derive from the introduction of psychological time: I can't believe I've just spent two hours figuring out this puzzle! - a relationship we are not unused to but which remains safely on the player's side of the equation. A game, unlike book or film, can use instable game-time that can be modulated by the player, thus deconstructing our notion of time as given, subject only to the laws of physics, beyond our control.

Relative Time

In her groundbreaking 1997 *Hamlet on the Holodeck*²⁴, Janet Murray identifies procedurality as a key characteristic of digital and/or interactive text: The time taken to traverse the text is a central constituent of the text. On the one hand, the text is quite materially assembled while it is being read, on the other, the time the reader/player spends fiddling (or negotiating) with the text contributes significantly to her experience of the text. Procedurality works with an integrative concept of time: player's time and game-time, divergent as they may be, are merged into a whole, the experience of the text which, at the same time, is the text. Einstein's concept of relative time, too, was intended as a step towards a unified theory of the world. The result, however, was also a step back from an idea of time as the objective and inexorable measuring-tool it had developed into since the invention of mechanic, calibratable clockwork. With the introduction of psychological, perceived time, the simple relationship between the time in the tale and the time necessary to tell it, is endowed with a new dimension. The incongruity between player's time and game-time creates an impression of time as squeezable, not made up of an infinite number of smallest possible elements of equal time. Computer games may use temporal divergence in a destabilizing way, extending and compressing time beyond recognition.

Traditional forms like book or film know of various techniques to achieve this temporal "silly putty" effect, which games have little or no recourse to. The techniques of alphanumeric, narrative text, from sentence- or paragraph-length to foreshadowing and flashback for books or slow-motion and high-speed for film, are impossible to map onto even explicitly narrative games and as soon as they are being used, the game switches from interactive into movie-mode. This shift always brings the act of playing the game to a halt, tears the player from one accustomed position towards the text and forces her to assume a new role. The movie scenes may of course be fast and action-laden or slow and descriptive, but this does not immediately translate into equal game-time. On the other hand, a fast-paced cut-scene may work as a retarding element - like the wolf-fights in *Gabriel Knight II* - while a slowly unfolding sequence may wrap up loose ends or provide key information and thus speed up the game considerably - like the overheard conversation between king and legate in *The Final Curse*. While not a central feature of games, the use of film and its temporal techniques contributes to the fragmentarisation and disruption of established time-concepts within games. [Interestingly enough, this effect is not reached through the application of in-medium techniques but through the combination of different media (film and interactive text) that is a constituent of multimedia, thus appearing to be a medium-inherent technique.]

Besides this crossover of fast and slow speeds, we also find extreme time-squeezes in games. Again: event-time in a game and the time taken to play out these events (the actual motions as well as the amount of time spent thinking puzzles over) can diverge like tale-time and telling-time. An event that would take up a lot of time in "real life" might be told in mere seconds, while a rather short-lived phenomenon may be represented extemporaneously. Whichever the relationship, in books or film, the telling time will always correspond directly to an amount of space taken up on the carrier medium. Computer games, however, traditionally and regularly employ a feature Scott McCloud²⁵ has identified as an inherent feature of comics (or of pictorial art in general): the representation of movement within a single panel/image/screen. There are not only speed-lines or ticking clocks that symbolize passing time but also the fact that the actions depicted in one panel or the sound of the words in a speech balloon, take up time as well - time that passes within the narrative of the comic (or painting) as well as in the outside world of the readers/viewers whose eyes move in time to take in the signs on the page.

A similar though not identical effect occurs in computer games with more or less static rooms that have to be explored by the player. In non-real-time-games or those that do not work with timers for their puzzles, game-time does not pass when stills are explored - the player might as well have dashed down to the supermarket for more Ramen and coffee (in which case, the player's time would be standing still as well). More often, the player will be busy solving a puzzle or taking in game-related information, both thinking and clicking. Time passes for the player - and only for her - and thus has the qualities of point and period at once. But time also passes for the narration that unfolds in the playing of the game (Murray's procedurality) and on this level it can be subject to the distortions of tale- and telling time, too. A dyadic and familiar relationship (1:n, like scanning a painting) is suddenly expanded when the n turns into in a clashing of time zones no other genre provides.

The other end of the spectrum is the so-called real-time game which keeps track even of time spent waiting, where narrative time passes by an idle or even absent player. While in a game like *The Day of the Tentacle*²⁶, the character Bernard starts picking his nose when the player is presumably not watching, the player has to pause *The Last Express*²⁷, to make fresh coffee - or the character Robert Cath has been arrested and the game is over by the time she returns. In this scenario, a player's time of value 0 maps onto an expanse of game-time which again maps onto an expanse of narrative time that can amount to anything between 0 and n. The characters in a closed book (or one that was abandoned lying open), on the other hand, will always at best live the kind of shadowy half-life of an endangered species that Christine Brook-Rose describes in her novel *Textermination*²⁸.

Reversible Time

The reversal of time seems to be the final frontier - for science as well as for us mere mortals who have to wrap our minds around this concept. As far as digital text is concerned, however, researchers seem to have said good-bye to the possibility: be it categorically (like Espen Aarseth's response to Gunnar Lieistol: "[L]inearity of time' is a pleonasm and is useless as a categorical description, since there can be no 'nonlinearity of time'."²⁹) or logically (like Anderson and Øhrstrøm, who in their 1994 paper "Hyperzeit" came to the conclusion that time in hypertext is only branching going forward, but linear in retrospect³⁰). Computer games seem to dismiss the unidirectionality of the time-arrow in their use of "death". Unlike narrative death for example in a novel (or in the plotline of a game), functional death in a computer game is never an ending or pivotal point. It functions much like being thrown in a board game, as a sort of penalty - go back to start (only, nicely, computer games allow the player to "restart" at a point further on in the game) and try again. Thus "death", but also the player's decision to reload a saved position, takes the player/reader back and forth in a zigzag path through the "story" of the game - seemingly able to "turn back the clock". However, the narrative of the game ignores this reversal - the player's input changes with her advanced knowledge of the game's workings, but most games react to this input as to prior interactions, without taking notice of the restarts and reconsidered approaches. In the text-experience of the player, the loops caused by reloading and restarting stretch along a single line, pointing forward to the end of the game. Reload is conceptualized not as changing events in the past with the help of insights gained in the future, but as a teleological learning process. After all, going back to a saved game or a position determined by the game, the player loses all items collected between this point and the figure's "death". A game's reload-function may be the first place to look for unorthodox behavior of time - but it is in fact the one element of a game that supports traditional temporality.

Of course Aarseth is right, in a way, when he rejects any notion of "nonlinear" time. The player is always physically rooted in a time that is ticking off more or less quickly down a singular, unidirectional arrow. For a "real" reversal of time, she would need a time-machine, not a computer game (although a combination of both might turn out to be a top-seller). However, there are games that force the player to at least think time backwards - a hard enough feat as it is. Two such games are *Day of the Tentacle* and *Discworld*³¹, both of which contain complex and repeated time-travel.

Day of the Tentacle consists of three time-levels which influence each other mainly in the direction from past to present to future. If a tree is felled in the past, then in the future a figure does not land in this tree where it would be stuck but on the ground where the player

can use it. However, in order to fell the tree, certain items have to be transported into the past and these items have to be found first. So, an event in the (relative) future enables an event in the past (which then again enables and determines more events in the future). In *Discworld*, hero Rincewind has to travel back in time in order to find out what caused the game's central problem, the appearance of a huge and fire-spewing dragon. So far so linear: the dragon has been summoned in a ritual that took place prior to his entrance. However, in order to find this out, the player has to collect items in the present, then move her figure to the past and there use items that chronologically speaking could not be in the figure's possession at that time. On the player's side, time in these games seems to be in order still: items are collected and then used. On the side of the game, however, time-logics work in two directions at the same time. The succession "ritual - dragon" establishes a past and a present that relate to each other causally. If the player accepts the temporal order the game thus establishes, then, in order to solve certain puzzles, she has to draw conclusions backward.

Conclusion

The constant clash of different and conflicting times seems to be a key-characteristic of computer games and especially graphic adventures. Narratives in traditional media like film or book exist in a bilateral tension-field of tale-time and telling time, the latter being split into objective and psychological time. And indeed, these genres originate from a time when time as a relatively straightforward (read: linear, increasingly measurable and regulated as well as regulating) concept. For computer games, this relation is far more complex. Conflicting concepts of time may exist not only within a single game, but in a single scene or element. As vessels and functions of clashing times, graphic adventures - and I venture to propose: computer games in general - are adequate representations of a world that strains to contain notions of time such as those proposed by modern physics. When games dare to involve their meta- or shell-level (like *Space Quest* in the acid-rain-scene), deeper embedding of time reversals and so on, further and more exciting temporal effects and thus a reduced tendency to think time as forward-directed and unitary at all times, will lie ahead of us.

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