

‘Is that my score?’: Between literature and digital games

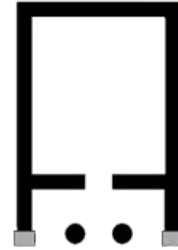
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antae

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‘Is that my score?’: Between literature and digital games

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Prologue

Discussing *Screen*, a well-known installation at Brown University’s virtual reality space, the CAVE, Noah Wardrip-Fruin recounts an anecdote that raises some of the issues that this essay will seek to explore.¹ The collaborators who produced *Screen* describe the installation as a ‘meditation on memory as a virtual experience, and on memory’s instabilities’.² *Screen* consists of a text with a thematic focus on the ephemerality of memory, written by Robert Coover and Wardrip-Fruin, which is initially projected onto the walls of the CAVE in a linear and legible way while also being read in voice-over. The user begins his experience by reading and hearing how ‘we hold ourselves in place by memories’ which are ‘fixed and meaningful texts in the indecipherable flux of the world’s words’. However, soon enough, memories are described as having ‘a way of coming apart on us, losing their certainty’. They start to ‘peel away’ as we frantically try but fail to push them back into place.

The theme of memory’s transience in *Screen* is not only conveyed through the text but through the whole experience of the interactive installation as the words projected onto the screens, in a second phase in the work, start ripping themselves from the walls at a gradually accelerating pace. At this stage, the reader, equipped with a wand or glove, can try to intervene by hitting them and returning them to the wall, but the task becomes more and more difficult until a point is reached at which the text overwhelms the reader, engulfing him in a whirlwind of indecipherable fragments. The physical and interactive experience of the installation and the thematic import of what is read become one.

It is difficult to argue that *Screen* does not make a valid case for being considered a ‘literary’ installation, as long as a wide-enough and non-essentialist definition of the literary is employed. If one analyses the text used, one finds that the language is often beautifully executed, moving, and it encourages reflection about a theme of universal significance. However, in an interview, Wardrip-Fruin describes the somewhat revealing reaction of a seven-year-old boy to the installation. Fresh from having a go at *Screen*, this boy looks at the scatter of words that remain at the end of his session and asks: “Is that my score?” The boy clearly experiences *Screen* primarily as a game. This reaction cannot be simply explained by referring to the child’s age; the game elements in the installation are

¹ Noah Wardrip-Fruin, Josh Carroll, Robert Coover, S. Greenlee, A. McClain, and Benjamin Shine, ‘Screen’, *Electronic Literature Collection* Vol. 2 (2011) [CAVE, 2002-2005].

<http://collection.eliterature.org/2/works/wardrip-fruin_screen.html> [accessed 19 May 2014]

² J. J. Carroll, R. Coover, S. Greenlee, A. McClain, and N. Wardrip-Fruin, ‘Screen: bodily interaction with text in immersive VR’, *SIGGRAPH ’03: ACM SIGGRAPH 2003 Sketches & Applications* (New York: ACM, 2003).

tangible for everyone. In the initial part of the experience, one is placed in front of a text projected on three screens. Subsequently, in order to interact with this digital installation, one has to hold a wand or glove and move it to push the words back as they seem to detach themselves from the walls. One has to do this repeatedly, and the faster one reacts, the longer the inevitable collapse of the text is delayed. The bodily engagement of the user with the projected words or letters demanded by *Screen* involves similar mechanisms to playing, for example, Nintendo Wii games which, through infra-red technology, make the screen an extension of the player’s body as he tries, for instance, to hit a ball in a game of tennis or to row as fast as possible in a canoe race.

This play element is highlighted in one authorial description of *Screen*. The authors refer to the way ‘the reader plays the text’, specifying that by ‘play’ they mean something between playing a computer game and playing a musical instrument.’ The reference to play is in line with Wardrip-Fruin’s concept of ‘playable media’ or ‘playable art’, by which he shifts the discussion from the attempt to distinguish between games and other genres to a discussion of how a particular work, irrespective of its classification, is played.³ Unlike most games, *Screen*, as Wardrip-Fruin says elsewhere, does not include a ‘contest or quantifiable outcome’, but it does tend to invite a kind of engagement that oscillates between reading on the one hand and playing as if with a toy on the other. In a later authorial description of the installation published on an online electronic literature collection, *Screen* is more unequivocally described as ‘an alternative literary game’ and reference is made to the ‘play sessions’ involved.⁴ The claims for *Screen*’s generic status thus come from different discourses. It is at once considered to be digital art, a VR installation, electronic literature, a playable work, and a digital game.

Another work inhabiting this liminal space among genres is Camille Utterback and Romy Achituv’s 1999 *Text Rain*, which is described as a playful, interactive installation by the authors.⁵ The text of this literary installation uses an adapted version of Evan Zimroth’s poem ‘Talk, You’ while also clearly alluding to Guillaume Apollinaire’s concrete poem, ‘Il Pleut’. A video of the poem-turned-installation, available on the authors’ website, shows various individuals playing with falling letters and trying to halt their fall by moving their own real-time image which is projected on the same screen as the letters. While the readers can try to arrest the fall of as many letters as possible in order to recreate lines or phrases from the poem, some of the readers dance, others catch falling letters with an umbrella, while others make the letters bounce on a cloth they wave up and down in pairs. The poetic words, or rather, letters of *Text Rain*, as in *Screen*, are remediated into an experience characterised by bodily interaction and game mechanics.

³ Noah Wardrip-Fruin, ‘Playable Media and Textual Instruments’, *dichtung-digital* (2005) <www.dichtung-digital.de> [accessed 19 May 2014]

⁴ Noah Wardrip-Fruin et al., ‘Screen’, *Electronic Literature Collection*.

⁵ Camille Utterback and Romy Achituv, *Text Rain* (1999) <<http://camilleutterback.com/projects/text-rain/>> [accessed 19 May 2014]

Proposition: Locating the Discussion in the Performative Turn

It is on the margins of the fluid boundaries between digital games and electronic literature, as well as between digital art and electronic literature, that I would like to dwell, briefly, in this essay. I argue that electronic literature, with its dependence on strong elements of play and its simultaneous claim to ‘literariness’, allows for a discussion of the interface between literature and digital games by exposing points of contact as well as divergence through the respective claims of the two discourses.

One key issue in this respect is what Roberto Simanowski calls an ‘aesthetic of *play*’ whereby the participant or player’s body is fully *engaged in* rather than *posited in front of* the work or the game.⁶ At stake here is, literally, the relation of the body to the work of art and the difference between works which primarily demand scopic appreciation or contemplation and works which demand bodily interaction and intervention. In *Writing Machines*, Hayles argues that if we are to respond to the way electronic literature extends or questions what we understand by literature, we have to develop a new literary criticism that involves a ‘full-bodied understanding of literature’.⁷ As Stephanie Strickland points out, ‘clicks, mouseovers, drags and drops, shifts of a joystick, scans, zooms, probes of all kinds’ are not only pervasive in all game environments but also in our reading of electronic literature.⁸

Clearly, the changing dynamics of reader engagement and involvement in contemporary art are not limited to electronic genres of literature. The ‘look but do not touch’ conception of the work as a static object and the understanding of the literary work as an organic integration of form and content that resists transference or translation have been problematic for decades. This shift is tangible, for instance, in the performative turn brought about by postmodernist and poststructuralist thinkers like Jean Francois Lyotard, Jacques Derrida and Judith Butler. Thinking of the performative involves shifting our attention from the work of art as an object to the eventhood involved in the encounter between the work and those who countersign it by not simply perceiving it and possibly internalising it, emotionally or cognitively, but also involving their own singular intervention in its enactment.

Electronic literature, as a genre, often embodies performative dynamics. In so doing, it critiques notions that may have become difficult to hold on to even in theory, such as the understanding of the work as an object of perception which we can hold at a distance and conceptualise absolutely, or as a fixed creation that originates in an author and that can be accessed, analysed and interpreted at any time by critics in ways which elucidate

⁶ Roberto Simanowski, *Digital Art and Meaning: Reading Kinetic Poetry, Text Machines, Mapping Art, and Interactive Installations* (Minneapolis and London: University of Minnesota Press, 2011), p. 16.

⁷ Katherine Hayles, *Writing Machines* (Cambridge, MA: MIT Press, 2002), p. 26.

⁸ Stephanie Strickland, ‘Dalí Clocks: Time Dimensions of Hypermedia’, *ebr* (2001) <<http://www.altx.com/ebr/ebr11/11str.htm>> [accessed 19 May 2014]

exhaustively and comprehensively what the work is about, different aspects of its form and the relationship between its form and its content. The fluidity of certain kinds of electronic literature, its openness to interactivity, the bodily engagement it often demands, its reliance on varying temporalities, and its combination of rule-driven and aleatory elements problematise what Derek Attridge describes as a ‘static’ conception of art which is at the heart of traditional criticism.⁹ The work becomes a transitory stage of what Jürgen Schäfer and Peter Gendolla, for instance, call an ‘open and recursive process’.¹⁰ In this context, the reader, for want of a better word, becomes not simply a receiver of some kind of thematic message but intrinsically implicated in the singular performance of the work.

These aspects of the mechanics of electronic literature are also crucial in the experience of playing certain kinds of digital games that require bodily engagement. In this sense, it may be worth exploring the contention that digital games and electronic literature encapsulate similar characteristics of the contemporary understanding of art. Indeed, I believe that more than the narratological strain, it may be worth pursuing the relation between digital games and literature in the context of a series of shifts or developments defining contemporary art, such as, for instance, what Francisco J. Ricardo calls the ‘ruptures of retinality, objecthood and materiality’.¹¹

Like a player of digital games, the reader of electronic literature performs the work through his bodily countersignature. Simanowski interprets the turn towards the performative in contemporary art as a consequence of what he calls a ‘neo-baroque’ moment that prioritises spectacle, sensory experiences and the ‘prevalence of technique and image over content and meaning’.¹² In this respect, Simanowski’s views echo similar denunciations of postmodernism for its supposed abandonment of meaning in favour of style. However, rather than sidelining meaning for the sensory, as Simanowski implies, what art as a performative event does is create different dynamics of meaning that are not merely representational. Shattering irreversibly critical conceptions about the transmission of pre-established meanings, art as a performative event makes the reader, perhaps more than ever before, a structural necessity in the creation of meaning through engagement.

The Singularity of the ‘Poetic’

It is here, in the relation between the work and the reader—who could also be the author—and in the dynamics of the signature and the countersignature that the performative event arises. And it is also here that I see an ineluctable difference between digital games and what may be called the singularity of the ‘poetic’, to which I will now turn.

⁹ Derek Attridge, *The Singularity of Literature* (London and New York: Routledge, 2004), p.107.

¹⁰ Jürgen Schäfer and Peter Gendolla, ‘Reading (in) the Net’: Aesthetic Experience in Computer-Based Media’, in *Reading Moving Letters: Digital Literature in Research and Teaching*, ed. by Jürgen Schäfer and Peter Gendolla (Bielefeld: transcript Verlag, 2010), pp. 81-108 (p. 88).

¹¹ Francisco J. Ricardo, ‘Juncture and Form in New Media Criticism,’ in *Literary Art in Digital Performance: Case Studies in New Media Art and Criticism* (London and New York: Continuum, 2009), pp. 1–9 (p. 4).

¹² Simanowski, p. 71.

Hayles argues that with digital poetry, the status of literature changes from ‘object to event’.¹³ Her claim is that digital texts, due to the fact that any digital programme exists in the form of coding that has to be activated repeatedly and always differently on different platforms, are a ‘process rather than an object’. Every time a digital text is accessed, it is performed differently, we are told, ‘independent of whatever imaginations and processes the user brings to it’. What Hayles means by the ‘eventhood’ of the digital work, therefore, is a mechanical property of the activation of coding, the language of programming. However, Hayles also acknowledges that the reader or user of digital texts does affect the process since he interacts with this event in ways that impinge on its progress and hence the course of the performance. To quote Hayles: ‘Less an object than an event, the digital text emerges as a dance between artificial and human intelligences, machine and natural languages, as these evolve together through time.’ In this respect, it may be said that electronic literature, in allowing for a form of distributed cognition, replicates the mechanisms of digital games that involve a process that evolves on the basis of a player’s interventions.

And yet, in what follows, I am more specifically interested in the ways in which ‘the poetic’ resists being equated with gaming or playing. Resistant to absolute definition, the poetic may be tentatively and even provocatively described as an essential non-essentiality in literature which resists being appropriated by any political, cultural, biographic, thematic or even generic classifications. The singularity of the poetic escapes absolute conceptualisation and categorisation while calling for and demanding a response from the countersignatory.¹⁴

The cue I would like to follow—provocatively, in an essay on electronic literature and digital games—comes from Maurice Blanchot or, more precisely, from one of Blanchot’s essays on Franz Kafka. In *The Infinite Conversation*, Blanchot articulates one of the paradoxical aspects of the singularity of literature: ‘the more a work comments upon itself, the more it calls for commentary; the more it carries on relations of “reflection” (of redoubling) with its center, the more this duality renders it enigmatic’.¹⁵

The Trial can be seen as exemplary in this respect, and, within it, the parable of the countryman before the law serves as a mise-en-abyme of our relation to the poetic. Joseph K. is summoned to a cathedral to meet a businessman, but instead he finds a priest who recounts a parable which he says is included in the writings that preface the law. A countryman seeks access to the law, but this access is always denied by a doorkeeper who

¹³ Katherine Hayles, ‘The Time of Digital Poetry: From Object to Event,’ in *New Media Poetics: Contexts, Technotexts, and Theories*, ed. by Adelaide Morris and Thomas Swiss (Cambridge and London: MIT Press, 2006), pp. 181–210 (p. 185).

¹⁴ See Timothy Clark, *The Poetics of Singularity: The Counter-Culturalist Turn in Heidegger, Derrida, Blanchot and the Later Gadamer* (Edinburgh: Edinburgh University Press, 2005).

¹⁵ Maurice Blanchot, *The Infinite Conversation*, trans. Susan Hanson (Minneapolis and London: The University of Minnesota Press, 1993), p. 391.

speaks about a further series of more powerful doorkeepers separating him from the law. The countryman waits for years in front of the door until he reaches the point of death. At this moment he asks a question to the door-keeper: why is it that, despite the fact that everyone strives to attain the law, no one ever tries to go through this door? The door-keeper’s response is as powerful as it is enigmatic: ‘No one but you could gain admittance through this door, since this door was intended for you. I am now going to shut it.’¹⁶

What makes this parable so powerful is that it seems to carry the weight of not only *The Trial* as a whole but possibly the whole novel. Joseph K. understands the import but not the meaning behind the parable. An exchange with the priest follows, in which the two debate the possible meaning of the parable. We are left with this: an attempt at commentary by the characters themselves about a parable that seems to escape codification into meaning. The parable and the subsequent attempt to interpret it do not simply represent a theme but perform it at the same time: speculation or commentary is both a necessity and an impossibility; one will never arrive at a definite resolution even though that resolution may exist elsewhere. The parable thus performs the paradoxical structure of the poetic. Its resistance to and the simultaneous triggering of commentary enact the dynamics of singularity, which resists absolute conceptualisation while demanding to be read in ways which cannot escape such conceptualisation.

Digital Games and the Poetic

This brings us to the main question this essay addresses: is the experience of literature and digital games distinguishable in relation to the singularity of the poetic? If there is a difference, in my view, it should not be located in a lack of self-reflexivity in digital games. In other words, it would be simplistic to say that games demand an immersive experience while literature always and exclusively demands critical reflection. Both literature and games can offer experiences of immersion or suspension of disbelief and critical distance. *Bioshock Infinite*, for example, has been read as meta-commentary on the notion of agency in games.

However, there is a major distinction to be made. A critical or reflective reaction to the work is only, if at all, a secondary consideration for the game player—as distinguished from the game theorist or game critic. Markku Eskelinen, building on a taxonomy developed by Espen Aarseth in *Cybertext*, argues that ‘the dominant user function’ in games is configurative. Gaming, for Eskelinen, is a configurative practice, and interpretation is done primarily in the context of a focus on ‘ends, means, rules, equipment, and manipulative action’.¹⁷ As such, gaming is primarily an ends-oriented or teleocratic activity regulated by specific goals. For Jesper Juul, these goals relate primarily to ‘a

¹⁶ Franz Kafka, *The Trial*, trans. by Willa and Edwin Muir, *The Complete Novels* (London: Vintage, 1999), p. 121.

¹⁷ Markku Eskelinen, ‘Towards Computer Game Studies’, in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (Cambridge, MA: MIT Press, 2004), pp. 36–44 (p. 38).

change of state, the movement from the initial state (the outcome has not been decided) to another state (the outcome has been decided)'.¹⁸ The gaming experience is, therefore, end-oriented, even if what this end may be is open to debate and to the actual variety witnessed in digital games.

While I would qualify Eskelinen's claim that the dominant user function in literature is 'interpretative,' because the word 'interpretation' suggests closure that the poetic actually resists, it may be said that responding to a demand for critical reflection is indeed central to the reader's relation to works which we consider to be poetic. In this respect, it may be worth highlighting the common tendency among electronic literature authors, which was very common in early electronic literature ten to fifteen years ago, of including an accompanying or even internal theoretical commentary to the work itself. Examples include seminal works like John Cayley's *riverisland*, Strickland's *vniverse*, and Talan Memmott's *Lexia to Perplexia*. For Raine Koskimaa, the reason for this is that, through electronic literature, both authors and readers are learning a new language and this leads to experimental shifting of positions among them.¹⁹ However, I believe the self-commentary in electronic literature may also be very indicative of the desire—conscious or unconscious—to posit the work as poetic. The self-commentary, the shift from the 'work itself' to theoretical reflection about it may thus be read, ironically, as an attempt to highlight the work's claim for 'literariness' or for being 'poetic'. To steal a phrase from Aarseth used in a different context, it may be said that to think of games as literature is to try to make games 'a more acceptable form of art'.²⁰ Hence the frequency of the phrase, 'this is not a game', used in relation to playable media.²¹

Aarseth, discussing a related, though not identical, issue to the one broached here, argues that one of the most important differences distinguishing games from stories is ambiguity.²² One does not ponder what the blocks in *Tetris* are made of while there is no moral dilemma for the player in killing innocent monsters in *Doom*. Even the concept of aesthetic beauty in gaming is mainly a cog in the gaming experience.

While Aarseth and Eskelinen's arguments are convincing in highlighting some fundamental differences between games and literature, I would take the matter a step further than claiming that the poetic element that our relation to digital games does not require is the demand for critical reflection: the poetic is, at one and the same time, that which resists such conceptualisation. For if we accept critical reflection as that which distinguishes and determines the poetic, we risk falling into the trap of turning literature into yet another

¹⁸ Jesper Juul, 'Introduction to Game Time', in *First Person*, ed. by Wardrip-Fruin and Harrigan, pp. 131–142 (p. 132).

¹⁹ Raine Koskimaa, 'Approaches to Digital Literature: Temporal Dynamics and Cyborg Authors', in *Reading Moving Letters*, ed. by Schäfer and Gendolla, pp. 129–144 (p. 131).

²⁰ Espen Aarseth, 'Genre Trouble: Narrativism and the Art of Simulation', in *First Person*, ed. by Wardrip-Fruin and Harrigan, pp. 45–55 (p. 49).

²¹ See Wardrip-Fruin, 'Playable Media and Textual Instruments'.

²² Aarseth, 'Genre Trouble', p. 48.

teleocratic or end-oriented discourse. In this way, the poetic becomes different only in the kind of ends it leads towards, in this case mastery by critical reflection. However, the singularity of the poetic is that which resists being reduced to a means towards an end, be it pleasure, expression, knowledge, or political motivation. The key moment in Kafka's *The Trial* mentioned earlier, for instance, does not allegorise literature in presenting literature as a quest for meaning through critical reflection. If it did, it would mirror the absolute conceptualisation of literature through thematic approaches. Rather, that moment registers a simultaneous call for commentary while also performing a resistance to the very possibility of definitive conceptualisation. More than ambiguity, therefore, the singularity of the poetic is marked by ‘undecidability’, a path that makes us aware of the impossibility of passage while always calling us to travel that passage.

Let us gesture at a conclusion with a few provocative claims aimed at fostering a different kind of discussion about the relation between digital games and literature to the one dominated by the ludology versus narratology debate that has marked game studies for a long time. On a formal and mechanical level, works of electronic literature like *Screen*, *Text Rain* and others, depend on dynamics that also characterise digital games. There is bodily engagement, a means-end orientation towards the work from the side of the user, a quest for pleasure or for some form of affect, and more. However, the ‘poetic’ element in literature—electronic or otherwise—also depends, at one and the same time, on suspending precisely such dynamics and resisting teleocratic appropriation in its relation to the countersignatory. This does not mean that digital games cannot be artistic and that they may not have aesthetic appeal for users. To argue in this way would be to refuse to see the extensive craftsmanship and talent needed not only in the development of visual and aural components of digital games, but also of other less obviously artistic aspects such as coding and programming. However, the ‘poetic’ is also a resistance to the mechanics of play that, on the other hand, is constitutive of digital games. Indeed, an installation like *Text Rain*, in so far as it is experienced primarily as a site for play and bodily engagement and the poem's text behind the raining letters is not deemed important, is less ‘poetic’ in the sense employed here than ‘playable art’, as Wardrip-Fruin would call it.

This leads to a final question that cannot remain unaddressed here: if the ‘poetic’ has served primarily to refer to something that excludes digital games as well as a range of works called electronic literature which do not require the kind of engagement suggested by the ‘poetic’, why should one employ the term in discussing these genres? Perhaps, this is indicative of a failure not so much of game studies but of contemporary mainstream literary criticism in its inability to adapt itself to new realities, like those of digital games and playable media, which puncture and stretch the traditional generic borders of the literary and the poetic. Indeed, if the interface between digital games and literature is to become a more fruitfully reflective space for interdisciplinary incursions, we may have to be ready to radically extend, if not abandon, some already-existing critical tools in favour of a yet-to-evolve critical language that can allow us to understand this interface better.

List of Works Cited

- Aarseth, Espen J.. 1996. *Cybertext: Perspectives on Ergodic Literature* (Baltimore, MD: The Johns Hopkins University Press)
- 2004. ‘Genre Trouble: Narrativism and the Art of Simulation’, in *First Person: New Media as Story, Performance, and Game*, ed. by Noah Wardrip-Fruin and Pat Harrigan (Cambridge, MA/London: MIT Press), pp. 45–55
- Attridge, Derek, *The Singularity of Literature* (London/ New York, NY: Routledge, 2004)
- Blanchot, Maurice, *The Infinite Conversation*, trans. Susan Hanson (Minneapolis, MN/ London: The University of Minnesota Press, 1993)
- Carroll, J. J., R. Coover, S. Greenlee, A. McClain, and N. Wardrip-Fruin, ‘Screen: bodily interaction with text in immersive VR,’ *SIGGRAPH ’03: ACM SIGGRAPH 2003 Sketches & Applications* (New York, NY: ACM, 2003)
- Clark, Timothy, *The Poetics of Singularity: The Counter-Culturalist Turn in Heidegger, Derrida, Blanchot and the Later Gadamer* (Edinburgh: Edinburgh University Press, 2005)
- Eskelinen, Markku, ‘Towards Computer Game Studies’, in *First Person: New Media as Story, Performance, and Game*, pp. 36–44
- Hayles, Katherine. 2002. *Writing Machines* (Cambridge, MA/ London: MIT Press)
- 2006. ‘The Time of Digital Poetry: From Object to Event,’ in *New Media Poetics: Contexts, Technotexts, and Theories*, ed. by Adelaide Morris and Thomas Swiss (Cambridge, MA/London: MIT Press), pp. 18–209
- Juul, Jesper, ‘Introduction to Game Time’, in *First Person: New Media as Story, Performance, and Game*, pp. 131–142
- Kafka, Franz, *The Trial*, trans. by Willa and Edwin Muir, *The Complete Novels* (London: Vintage, 1999)
- Koskimaa, Raine, ‘Approaches to Digital Literature. Temporal Dynamics and Cyborg Authors’, in *Reading Moving Letters: Digital Literature in Research and Teaching*, ed. by Jörgen Schäfer and Peter Gendolla (Bielefeld: transcript Verlag, 2010), pp 129–144
- Ricardo, Francisco J., ‘Juncture and Form in New Media Criticism,’ *Literary Art in Digital Performance: Case Studies in New Media Art and Criticism* (London/ New York, NY: Continuum, 2009), pp. 1–9
- Schäfer, Jörgen and Peter Gendolla, ‘Reading (in) the Net’: Aesthetic Experience in Computer-Based Media’, in *Reading Moving Letters: Digital Literature in Research and Teaching*, pp. 81–108
- Simanowski, Roberto, *Digital Art and Meaning: Reading Kinetic Poetry, Text Machines, Mapping Art, and Interactive Installations* (Minneapolis, MN/ London: University of Minnesota Press, 2011)

Strickland, Stephanie, ‘Dalí Clocks: Time Dimensions of Hypermedia’, *ebr* (2001)
<<http://www.altx.com/ebr/ebr11/11str.htm>> [accessed 19 May 2014]

Utterback, Camille and Romy Achituv, *Text Rain* (1999)
<<http://camilleutterback.com/projects/text-rain/>> [accessed 19 May 2014]

Wardrip-Fruin, Noah, ‘Playable Media and Textual Instruments’, *dichtung-digital* (2005)
<www.dichtung-digital.de> [accessed 19 May 2014]

Wardrip-Fruin, Noah, Josh Carroll, Robert Coover, S. Greenlee, A. McClain, and Benjamin Shine, ‘Screen’, *Electronic Literature Collection* Vol. 2 (2011) [CAVE, 2002-2005]
<http://collection.eliterature.org/2/works/wardrip-fruin_screen.html> [accessed 19 May 2014]