

How Is Empathy Evoked in Interactive Multimodal Life Stories?*

Evelyn Chew

Alex Mitchell

Department of Communications and New Media
National University of Singapore, Singapore

Abstract

While the printed word, music and film have well-known means of evoking empathy, interactive digital media lacks such well-established storytelling strategies, especially with regard to non-fiction works. Autobiographical storytellers who wish to relate their experiences interactively, such as through hypertext, do not have a clear toolkit of techniques to rely on. In this paper, we consider some techniques used by autobiographical authors of hypertext stories to evoke empathy. Our close reading of two interactive works, Travis Megill's *Memorial* and Steven Wingate's *daddy labyrinth*, indicates that multimodal elements and the author-reader relationship are important factors in conveying a sense of "what it's like" to be the autobiographical life subject. In *Memorial*, a tribute to a dead brother, the narrator is monologic and in-text hyperlinks uncover the layers of emotion of a brother's grief. Occasional unexpected revelations from clicking a hyperlink give insight into the author's inner conflictual, buried feelings of guilt. *daddy labyrinth*, a maze of hyperlinked vignettes that mirror the author's psychological space, engages the reader conversationally, and is structured to reflect the author's interior journey to exorcise the anger issues inherited from his father. Using Douglas and Hargadon's distinction between immersion and engagement, we suggest that affective empathy is more likely to be evoked when a hypertext immerses the reader in a single, consistent stream of consciousness, whereas cognitive empathy is more likely to arise if the hypertext seeks to engage rather than immerse, by dialoguing with the reader and constantly overturning conventional schemas, and by foregrounding its structure.

Keywords

affective empathy, cognitive empathy, interactivity, hypertext, immersion, engagement

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Empathy and interactive media have each sparked growing research interest in recent decades. Empathy, it is argued, makes understanding one's neighbor possible. With increasing diversity in global populations, this understanding becomes key to peaceful coexistence. Moreover, owing to online social networks and the ubiquity of personal computing, people across the world are more in touch with one another than ever, giving the online sphere unique potential for encouraging empathic understanding of others, through the sharing of life stories. Digital life stories seem set to proliferate in the near future, as life storytellers become increasingly sophisticated computer users (and as the so-called digital natives become life storytellers). Some interactive life stories already do exist, such as Jason Rohrer's philosophical-autobiographical videogames, Christine Wilks' *Fitting the Pattern*, and Numinous Games' *That Dragon, Cancer*, among others.¹

If fictional literature fosters perspective-taking and empathy, as many researchers claim (Johnson 154; Bal and Velkamp 8-10; Black and Barnes 32), then life stories, by connecting us with real people's lives, have perhaps more potential to evoke empathy with those different from us.² In life stories, the emotional buffer of a fictional world is absent. Life stories make reality an essential condition of the story, and so the reader's vicarious experiences acquire a particular rawness that arises from empathetic contact with the autobiographer's experience. Drawing from real life, autobiographical works are, arguably, uniquely positioned to provide insight and wisdom about life, through the eyes of another person (Smith and Watson 18). Lessons from the autobiographer's life enter into dialogue with the reader's own existential meaning-making, so that what he/she reads informs his/her understanding of the world he/she inhabits.

Given that life stories are on the rise in interactive digital media, we should consider in what medium-specific ways interactivity can evoke empathy in readers of these life stories. Print narratives and film evoke a character's subjective experience ("what it's like" to be someone) using well-established strategies such as interior monologues, cinematic point-of-view shots and narration, extreme close-ups,

¹ Recent storytelling platforms like *Cowbird*, *Binumi* and One More Story Game's *Storystylus* may soon revolutionize online storytelling, by making it easy to create multimodal stories. We refer to "interactive life stories" as stories authored with the explicit intention of relating an episode or episodes of the person's life, and which use interactivity as a key component of the delivery of their story.

² Kidd and Castano (377-80) found that non-fiction did not increase empathy as much as fiction; however, the non-fiction material used in the studies was typically non-narrative in nature and therefore, unlike life stories, did not involve reader transportation or immersion.

and flashbacks (Branigan 5-28; Cowie 91; Thon 71-84).³ By contrast, the role interactivity plays in involving readers empathically in a life story is yet to be explored.⁴ This paper studies how empathy is evoked in two autobiographical hypertexts, through a mixture of multimodal strategies, interactive immersion and engagement, and an effective hypertext structure.

Hammond and Kim trace the cultural origins of the word “empathy” to the Greek *sympátheia* or “feeling-with,” more recently characterized as perspective-taking and “fellow feeling” (1-13). But is this “fellow feeling” between the empathizer and the empathized the *same* feeling? Does empathy mean feeling *exactly* the same as the target person? De Vignemont and Singer consider that “[t]here is empathy if: (i) one is in an affective state; (ii) this state is isomorphic to another person’s affective state; (iii) this state is elicited by the observation or imagination of another person’s affective state; (iv) one knows that the other person is the source of one’s own affective state” (435).

What does an “isomorphic” affective state mean? Given the incommunicability of a person’s total experience, it seems impossible to know if one has precisely the same feelings as another. The question enters into the realm of subjective experience where words are insufficient, and it is tempting to agree with Wittgenstein that “[w]hereof one cannot speak, thereof one must be silent” (7). Yet experience attests that this “fellow-feeling” does exist, and is a well-documented fact in clinical settings (Fogarty et al. 675; Messina et al. 169). The reflections of Hume, Edith Stein and other philosophers indicate that empathy can be spoken of, even if it cannot be completely defined.⁵ Despite the impossibility of providing a litmus test to ascertain if the “isomorphic state” required for empathy has occurred (to know, for instance, whether my empathic feeling of sadness is the same as the sadness experienced by

³ Representing a subjective experience and evoking empathy differ slightly; representation of subjective experience appears on the part of the media, while empathy includes affective and cognitive resonance on the empathizer’s part. Nonetheless, a subjective experience represented completely enough would, arguably, succeed in making the receiver experience the same emotions and thoughts of the character, resulting in empathy.

⁴ Except, perhaps, for the area of “empathy games,” such as Susana Ruiz’ *Darfur is Dying*, in which the player takes on the role of a person in an underprivileged or difficult situation. The premise here is that simulation causes empathy, but further close readings are required to develop a more complete theory of empathy in interactive media.

⁵ Hume uses the term “sympathy” because at that time the distinction between sympathy and empathy had not yet emerged. He writes that the experiencing subject’s feelings are shown by “external signs in the countenance and conversation,” producing an impression on the receiving subject that is of such “force and vivacity, *as to become the very passion itself, and produce an equal emotion, as any original affection*” (226; emphasis added).

the person who provoked it), we can conclude that there is *something* in the affective and cognitive states of the empathized which is mirrored in the empathizer.

De Vignemont and Singer's definition deals with empathy as an affective state; others distinguish between cognitive and affective empathy (Batson 3-12; Shamay-Tsoory 215-6; Stansfield and Bunce 9-18). Cognitive empathy refers to perspective taking, or the ability to understand mentally how someone else is feeling; affective empathy refers to *feeling* what the other is feeling (Batson 7). We argue that empathy in the full sense involves both. On the one hand, affective empathy presupposes cognitive empathy: "catching" a feeling without understanding why one is emotionally affected refers to emotional contagion rather than empathy (Hatfield, Rapson, and Le 19). On the other hand, cognitive empathy alone results in simple perspective-taking, without the emotional resonance associated with "fellow-feeling" (Shamay-Tsoory 215). Thus cognitive empathy can occur without affective empathy, but not vice versa.

Narrative empathy—the form of empathy present in narrative literary works—includes both affective and cognitive dimensions: it is "the sharing of feeling and perspective-taking induced by reading, viewing, hearing, or imagining narratives of another's situation and condition" (Keen). This paper concentrates on the formal strategies in autobiographical hypertexts that draw the reader into an empathic relationship with the author. Narrative empathy arises when the text evokes for the reader a sense of "what it's like" to be in someone's place. "Qualia" is a term used in narratology to describe the "raw feels" of an experience encoded within a text, verbally or nonverbally, explicitly or implicitly (Herman 107-36).⁶ A life story that seeks to evoke empathy must somehow re-create the "qualia" of someone's lived experience for the reader. We argue that in hypertexts, "qualia" is re-created from the reader's combined experience of the verbal, visual, and auditory elements of the work, as well as the kinaesthetic interactivity through which the reader moves the story forward.

How do hypertext autobiographies evoke empathy for their autobiographical storytellers? Our explanation draws upon Lewis and Hodges' psychological account of empathy for strangers, David Herman's concept of narratological world-building, Douglas and Hargadon's concepts of immersion and engagement, and the interactive cybernetic feedback loop as components that contribute to reader empathy.

According to Lewis and Hodges, we can feel empathy for people we do not know, because we build a mental construct in our minds of who they are, given the

⁶ "Qualia" originated in phenomenology to describe the totality of a lived experience (Tye).

limited information we have; based upon our existing mental schemas of stereotyped social categories, we infer their feelings (73-82).⁷ Online autobiographies involve the same kind of empathic process, except that the usual nonverbal cues are also missing. The autobiographical “I” is constructed in the reader’s mind by applying the aforementioned social stereotypical categories to our imaginings of what the author must be like from the multimodal text; we empathise based upon our impressions of their self-representations.

Of course, the reader does not imagine only the autobiographer, but mentally constructs an entire storyworld. According to Herman, storyworld building is influenced by medium-specific characteristics (107), including layout, typeface and visual elements.⁸ The entire hypertextual interface—background color, typeface and size, photographs and videos, the visual layout—as well as the structure of the hypertext, while not strictly part of the diegetic world, influence storyworld construction in the reader’s mind.

Hypertexts’ intrinsic interactivity—understood here as “a cyclic process in which two actors alternately listen, think, and speak” (Crawford 5)—also necessarily affects storyworld construction.⁹ Hypertext is based on an interactive cybernetic feedback loop: the physical action of clicking the mouse provides input into the computational system, which processes it and then provides the relevant output, to which the reader again responds. The cybernetic feedback loop affects the reading of a life story in the following ways: First, it regulates the pace at which information is

⁷ Lewis and Hodges argue that “a substantial part of understanding others comes from within the empathizer’s own head, including falling back on very impersonal information such as stereotypes associated with the target person’s roles or group memberships” (73).

⁸ The quotation states: “Storytellers use the semiotic cues available in a given narrative medium to design these blueprints for creating and updating storyworlds. In print texts, the cues include the expressive resources of (written) language, including not just words, phrases, and sentences, but also *typographical formats, the disposition of space on the printed page (including spaces used for section breaks, indentations marking new paragraphs, etc.), and (potentially) diagrams, sketches, and illustrations*. In graphic novels . . . the nonverbal elements play a more prominent role: the arrangement of characters in represented scenes, the shapes of speech balloons, and the representations of the scenes in panels that form part of larger sequences of images and textual elements, can convey information about the storyworld that would have to be transmitted by purely verbal means in a novel or short story without a comparable image track . . . [readers/viewers] draw on such medium-specific cues to build on the basis of the discourse (or *sjuzhet*)” (Herman 107; emphasis added).

⁹ Hypertext is “an umbrella term denoting a specific principle of electronic document organization. It interlinks digital files of various textual and audiovisual formats into an interactive, associative network” (Ensslin 258). Hypertexts are composed of *lexia*, or nodes, connected by hyperlinks.

dispensed, by revealing only a certain part of the work at each moment. Second, it inserts the reader inside the story in a quasi-physical way: while not physically in the storyworld, the text implicates the reader more directly in the story because of his/her constant physical participation. Third, a different kind of cognitive effort is needed compared to print text: the reader is required to make choices between links, and to logically connect the source text and the new text (Tyrkko 97-98). Effort demanded varies according how the *lexia* are used; some hypertexts use strategies like lexical repetition to facilitate immersion.

Some argue that the constant physical interaction demanded by the cybernetic feedback loop is inimical to transportation and immersion in a hypertext (Mangen 404-09).¹⁰ We cannot expect the same effect from hypertext as from a printed book; Douglas and Hargadon suggest that interactive works involve readers in another way, through a mixture of immersion and engagement (153-60). Immersion, the mental absorption that arises from a familiar narrative schema, alternates with engagement, when unexpected schemas disrupt reading flow, causing the reader to take an extratextual perspective. Interactive works typically involve both, to varying degrees. Our case studies show how *Memorial* evokes affective empathy by facilitating immersion, while *daddylabyrinth* favors both cognitive and affective empathy, by encouraging both engagement and immersion.

*Memorial*¹¹ by Travis Megill is a hypertext-based *Twine*¹² game, structured as a vector with side branches (Ryan, *Narrative* 167). This virtual memorial to a dead brother is introspective and brooding, and reveals the story of the brother's life and death, and their relationship as siblings. Veiled allusions surround the death; the cause of death is implied, but never clarified. What does emerge clearly is the pain, bewilderment and regret of a grieving brother. In comparison, *daddylabyrinth* is alternately light-hearted and deeply serious. Hosted on the Scalar platform, *daddylabyrinth* explores the author's ambivalent relationship with his dead father, via an ongoing confession-conversation with the reader. The labyrinth of Greek

¹⁰ Transportation, closely linked to immersion, occurs when the reader's/viewer's attention is captivated by the storyworld, forgetting completely about the physical world. Mangen also argues that the cognitive effort needed to link the source text and the target text disrupts continuity. See also Mangen and van der Weel (1-24), and Miall and Dobson.

¹¹ Although *Memorial* is relatively little-known, its comments section and its mention by noteworthy digital artists such as Anna Antropy indicate that readers have been deeply moved by it (see for instance Petit).

¹² *Twine* is a free software created by Chris Klimas in 2009 that allows writers to easily create web-based hypertext works.

mythology becomes a metaphor for the author's inner world and he doubly identifies the monster at its metaphorical core with his alcoholic father, and with his own fears.

The following discussion shows how each work fosters immersion and/or engagement through textual style, multimodal world building, and hypertext structure: monologic introspection in *Memorial* tends to immerse the reader, arousing affective empathy, while *daddylabyrinth* is conversational and engaging, more often provoking cognitive empathy.

***Memorial*: Introspective Monologue (Immersion > Engagement)**

Memorial, by addressing an absent deceased loved one, recalls the literary tradition of the apostrophe prevalent in pre-modern poetry and theatre (Baldick). It also recalls the other meaning of apostrophe, in which a speaker “turn[s] away from [the] actual audience to another one” (De Jong), as the author addresses not the hypertext reader, but his dead and absent brother.

Memorial evokes affective empathy verbally, visually, and interactively. Verbally, the second-person direct address inserts the reader instantly into the text as addressee, while simultaneously presenting him/her with a mystery: “I wish I had picked up the phone when you called yesterday.”¹³ Who is “I”? Who is “you”? Why is the “I” experiencing regret? Why did “you” call yesterday?

The double deictic “you” places the reader in the odd position of being addressed as if he/she were the dead brother. The actual hypertext reader is, in fact, completely ignored in the discourse, positioned as an eavesdropper on a private conversation between the author and his dead brother. The feeling of disembodied invisibility is exacerbated by the pitch black background; the reader becomes privy to the author's stream of consciousness, and seems to be intruding on or covertly witnessing a scene of private mourning.

Taken by itself, the “you” narration used in *Memorial* is clearly directed at the deceased brother; the reader has no agency or power to change the plot, yet feels directly implicated and drawn into the story—arguably more so than if *Memorial* were in the print medium. What accounts for this?

First, it is difficult to avoid the denotative meaning of “you” as a direct form of address. As a person deixis, the word already interpellates the reader directly. Although the context indicates that “you” refers to the dead brother, its use conflates

¹³ Hyperlinks are underlined here; in the *Twine* interface they appear as blue text with no underline.

the reader with the dead brother, resulting in a double deixis (Herman 346-50). This effect is achieved through the invisibility of both narrator and narratee (the diegetic “you”); unlike in theatre, no nonverbal cues in body language are available to indicate who the author is addressing. (If we imagine *Memorial* with a picture of the brother from the very first page, the feeling of being directly addressed is lost, since the “you” then has a clear target referent.) Second, *Memorial* as an interactive text prevents the reader from disavowing the conflated “you/brother” identity, because every new page that appears is a result of choosing and actively clicking on a hyperlink. Activating a hyperlink differs from page turning: it is a result of choice, and hence an act of active—albeit subtle—agency.¹⁴ This choice implicates the reader because the cognitive interactivity (of interpreting the text and choosing the link) works in tandem with explicit interactivity (the act of clicking) in the meaning-making process.¹⁵

Visual strategies include choice of color and minimalist on-screen layout, as well as the placement of photographs within the hypertext. Colors, layout and fonts vary widely compared to the conventional printed book, taking on greater significance in storyworld construction. For instance, *Memorial*’s few lines of taciturn text, starkly white against a wall of solid black (with blue hyperlinks), create an impression of intimate space where the reader is “alone” with the text, and even of direct access to the author’s thoughts.¹⁶ The screen “disappears” from the reader’s attention as a window through which we get at the content that matters (Introna and Ilharco). The sober visual style works to focus attention and immerse the reader in the author’s stream of consciousness.

Other multimodal elements, such as childhood photographs and the image of the handmade Christmas card, are strategically placed within the text to contribute to immersion rather than distancing. While the indexical nature of photographs often hinders stream-of-consciousness identification by “othering” the author-narrator and the subject matter (see Nichols 35), in *Memorial* they heighten pathos and empathy.

¹⁴ A reader, clicking on a link, commits him/herself to continue reading, just as a reader by turning a page implicitly agrees to become more involved in the work. For more on this, see Tanenbaum and Tanenbaum’s “Agency as Commitment to Meaning” (11-17).

¹⁵ The terms cognitive and explicit interactivity come from Salen and Zimmerman’s four modes of interactivity—cognitive, functional, explicit and meta-interactivity. Cognitive interactivity refers to the mental and emotional dimension of participation with a work; explicit interactivity involves overt physical participation to influence outcome. Functional interactivity relates to structure and the visibility of navigational options. Meta-interactivity is how a work relates to its wider context (59-60).

¹⁶ The color scheme is a *Twine* default, but Megill uses it to good advantage in fostering empathy here.

This is because *Memorial* first allows the reader to engage in world building and emotional identification with the characters before presenting the photographs of the brothers, which appear only in the branches of the sixth main node. By highlighting life events and memories that are both mundane and universal, *Memorial* invites readers to empathize, and to imagine the brothers' close relationship by drawing upon their own experiences.¹⁷ Megill builds up the backstory by sharing childhood and home-related incidents. Participating in his thoughts, the reader is tacitly introduced into their world, and invited to vicariously relive those memories in the author's place and from his point of view. The intimate and informal address "Remember when . . . ?" invites the reader to summon his/her own childhood memories and thus to identify with the author's experience as a protective older sibling who has lost a brother and a good friend.

Despite the vicarious shared memories, information about both characters is sketchy, allowing readers to "fill in the blanks" using familiar social categories such as "artistic," "adoring younger brother," "doting older brother." These familiar types ease the process of empathic identification, so that when the photographs do appear, they become a forceful reminder of the reality of the story. After the reader has had time to form an emotional "bond" with the author, the photographs return the reader's attention to the real world with the photographs; being able to put a face to the author brings home the reality of the story and results in greater pathos and empathy with the author than before.

The above suggests that *Memorial* sets up conditions for immersion to occur: the reader's attention is absorbed in a storyworld constructed on minimal but affectively rich information. Interactivity paces the story and regulates information release, making the reader stop and contemplate the text instead of skimming. The limited information revealed in the few lines of each node lures the reader further into the story, by suspense and curiosity, but the hyperlinks create necessary pauses in the story, giving time for the words to sink in and contribute to immersion rather than interrupting the reader.

All three—the visual aspect, language and interactivity—create a sense of immersion that facilitates the reader's identification with the author's feelings by (paradoxically) putting the reader in the deceased brother's place. Having examined how verbal, visual and interactive means are used to evoke empathy for the author,

¹⁷ Marie-Laure Ryan's principle of minimal departure ("Possible Worlds") states that in the absence of evidence to the contrary, people generally imagine the (fictional) diegetic world as similar to their own. This supports the idea that readers and viewers of narrative texts "fill in the blanks" with their own experiences. Ryan refers to the creation of fictional fantasy worlds, but the principle is equally applicable here.

we now consider how interactivity and the structure of the work contribute to feeling what the author feels.

Structure and Meaning in *Memorial*: Onion of Empathy

Memorial is structured around nine main nodes with branches two or three layers deep. The main nodes (see fig. 2) are generally descriptive and emotionally superficial, while the branches are more introspective, containing an emotional comment or a memory that fleshes out the storyworld and its characters. The branching nodes contain two kinds of utterance, such that three levels of intimacy are discernible: description, reflective/conversational, and raw emotion (see fig.1). On the intermediate reflective/conversational level are shared memories: “Remember when I wrote these poems for you?” On the deepest level, pathos comes across in a single word, sentence or phrase: an outburst of grief or wistful regret. The tone is introspective, monologic, and sometimes self-recriminatory, rather than conversational: “Wish I had said so many things.”

Although *Memorial* is a vector with branches, thematically we can see it having an onion structure, with nodes that are emotionally “cooler,” while deeper layers in the side branches reach closer to the story’s emotional core, at which lies the author’s grief. Below in fig. 1 are examples from each kind of node:

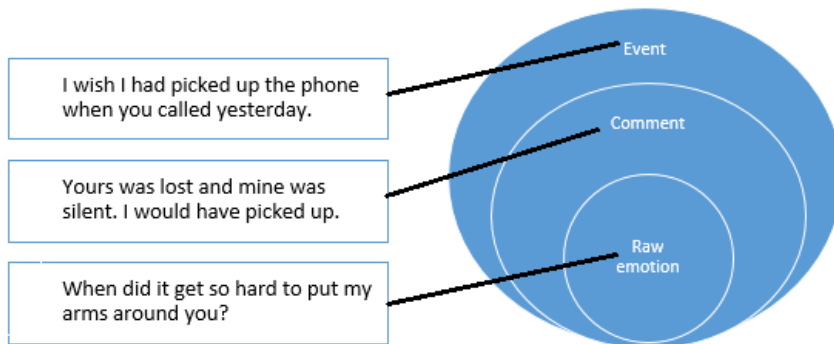


Fig. 1. Thematic layers of emotion in *Memorial*

As readers move through the nodes, they are immersed in the story through textual continuity and occasionally engaged (rather than immersed) through textual discontinuity. Textual continuity arises from lexical repetition or semantic association between source and target hyperlinked text (Tyrkko 23), overcoming the difficulty of the reader’s attention being disrupted. The hyperlinked source text is either repeated as the first word in the target node, or refers to the same time frame so that the storyworld feels continuous (see fig. 2). For instance, consider the node ending, “So far away, but I didn’t feel it until today.” Clicking “today” reveals a node which begins, “Today I got up early . . .” Instead of direct repetition, the link may also be associative, such as the link between main nodes 1 and 2 (see fig. 2). The repetitions and associations form semantic bridges, smoothing the transitions between nodes to near invisibility, like turning a page in a book. Instead of discontinuous breaks, lexical repetition and associations create a near-seamless hypertext reading experience.

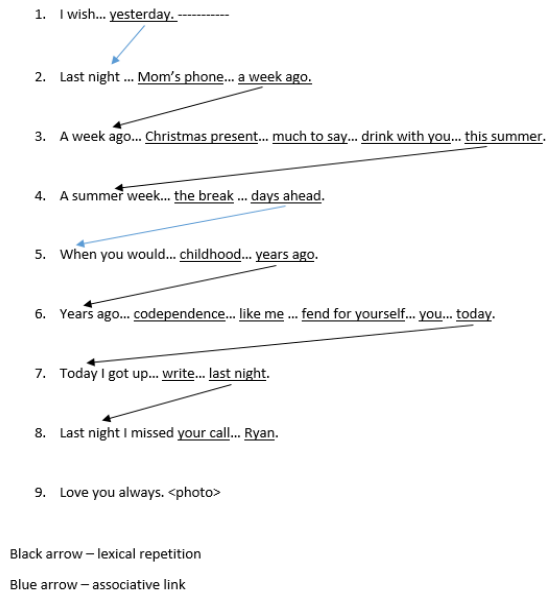


Fig. 2. Source-target semantic and lexical links in the main nodes of *Memorial*

While the hyperlinks in *Memorial* mostly facilitate immersion, subversion of expectations occurs at two points, creating a discontinuous experience and causing the reader to “stand outside the text.” Megill creates a unique hypertext-based dramatic climax by allowing for double readings, bringing the reader out of immersion to textual engagement before re-immersing him or her in the textual world. One of these examples follows:

It’s hard, knowing I left you to fend for yourself. Moved out of the apartment we shared, and then across the country, to give you room to grow.

So far away, but I didn’t feel it until today.

Clicking on the hyperlinked “you” produces a node with a single word: “Me.” The reader’s initial puzzlement provoked by “you” changing suddenly to “me” causes the reader to return to the previous node and re-negotiate the meaning of the sentence.¹⁸ At this point, a shift can be observed from immersion in the text to engagement, owing to the breach in the stream-of-consciousness narration. The hyperlink functions to “peel away” the superficial layer in the narrative, to reveal the author’s innermost fear that he has perhaps simply been selfish. This new meaning reveals a darker subtext that overshadows the original meaning: the author’s apparent generosity is re-evaluated as possibly an act of selfish egoism. With this “double take,” the author gives the reader both the “official,” politically correct explanation and a deeper, subjective guilt-ridden perspective from his interior world, which is the complete opposite of the first. The reversal of the person deictic from “you” to “me” also belongs to the inmost emotional layer, so that the tone shifts suddenly from conversational tone to introspective, soul-baring confession.

This unexpected rupture of the narrative schema, however, is momentary; when the target node “me” is interpreted in the light of the previous sentence, the new meaning is consistent with the overall self-recriminatory tone of the work. The new reading is easily assimilated into the larger picture, and the reader proceeds as before, slipping back into the stream-of-consciousness narration. In this way, hyperlinks in *Memorial* create a sense of immersion in the textual world as well as occasionally

¹⁸ Tyrkko calls this the “backtracked” mode of coherence negotiation, where backtracking to an earlier node is required to comprehend the target text properly: “[T]he reader finds the linking initially incoherent and resolves the cohesiveness retroactively, essentially turning the direction of the linking reference around and looking for a cohesive tie” (129).

subverting this immersion by making the reader “go out” of the text to engage with it on a different level, before resuming the stream-of-consciousness narration.

Memorial also evokes narrative empathy by mirroring Megill’s subjective experience through analepsis and the recursive return. In the text, prominent temporal markers indicate diverse time frames: the main nodes proceed from “last night,” to “a week ago,” “years ago,” “this summer,” and “today,” before finally going back to “last night.” Analepsis combines with the ubiquitous <Return> link at the end of each branch, so that the same sentences are read over and over again; the result is a meandering stream-of-consciousness narration, which jumps haphazardly across time intervals, reflecting the confused thoughts of a bereaved person unable or unwilling to conform to a rational, linear train of thought, whose ruminations go back and forth obsessively around a single theme, throwing together memories in complete disregard for chronology.

Thus, multimodal world building, textual strategies such as the double-diegetic “you” and stream-of-consciousness narration work together within a larger thematic structure to evoke a sense of empathy or “feeling-with” in the reader. The cybernetic feedback loop undergirds and paces the reading experience, but owing to lexical repetition and association, the hyperlink mostly ceases to be a source of disruption and allows for immersion, except when backtracked coherence negotiation is employed to create an additional layer of authentic, subjective meaning. While interactivity always involves physical engagement, this need not include making strenuous choices. *Memorial* succeeds at immersion precisely because it does not ask the reader to make choices that will influence the course of events in the storyworld.¹⁹ Instead, each link simply reveals an additional aspect or layer to the story. In fact, a work like *Memorial* allows us to posit that physical interaction does not necessarily subtract from immersion but can in fact contribute to it, providing strategies are in place to smoothen the transition.

***daddylabyrinth*: Conversational Partners (Engagement > Immersion)**

daddylabyrinth consists of over three hundred nodes of text and media, interwoven by multiple links and prominent navigational devices. By highlighting

¹⁹ In *Narrative as Virtual Reality 2*, Ryan classifies interactive narratives as ontological or exploratory, depending on whether the reader can make consequential changes to the storyworld outcome (162-65). *Memorial* and *daddylabyrinth* are exploratory rather than ontological.

functional and explicit interactivity, *daddylabyrinth* engages more than it immerses. The author himself directly encourages engagement, by dialoguing with the reader, making medium-conscious comments and occasionally breaking the fourth wall. While *Memorial* evokes empathy through a single stream-of-consciousness narrative, in *daddylabyrinth* empathy emerges through dialogue and playful engagement, lending cognitive empathy greater prominence.

Part of this engagement is the author's invitation to actively participate in storyworld building: copious amounts of multimodal information—prose, graphics, layout, photographs, documents and recorded videos—provide the reader with a multimodal bank for storyworld construction. The reader need not “fill in the blanks” to empathise with a stranger, because abundant anecdotes from the author's entire family history are supplied, allowing readers to construct a detailed impression of the (implied) author. Each node presents self-contained episodic fragments, making the reading experience like assembling a jigsaw puzzle where the reader pieces information together into a multimodal understanding of the author's life.²⁰

As the reader engages with the text, he/she is constantly reminded of its historical, meta-interactive reality. *daddylabyrinth*'s choice of artefacts, photographs, documentation, and the use of specific dates, lend the story historical weight, linking the digitally mediated story to the real world, affirming the story as something that really happened. Some photographed items evoke empathy through indirect storytelling, such as a scrawled note in childish handwriting which protests against attending his father's court trial: “We do Not Have to be there JAN 6TH” (“Waiting for the End of the World”).²¹ The author-as-child perspective comes through here, revealing the impact of these events on the author's childhood.

The hypertext's main photographic backdrop, which appears for all nodes, features a black-and-white photograph of the author's father with his arms protectively outstretched behind his infant son on a child's bicycle. By the author's own admission, his father's presence permeates his whole life to the point of obsession; this presence is replicated in *daddylabyrinth*, with the father's inescapable presence on every single page. He is always present in the background, just as he is a constant in the consciousness of his writer son. This ubiquitous photographic presence, however, inspires cognitive empathy rather than affective empathy,

²⁰ The hypertext's voluminous networked structure means the storyworld created in each reading may differ among readers as they select different nodes or follow a different sequence (Wingate, “On the Interactive Digital Lyric”).

²¹ As no page numbers appear in this hypertext, citations refer to the node title, which appears at the top of each webpage in *daddylabyrinth*.

because the photograph's indexical link with concrete reality identifies the photographed subjects as "other," disconnecting us immediately from the author's stream of consciousness. The reader intellectually grasps the metaphor of the father's presence haunting the author's life, but it does not provoke an affective identification with the author or his father.²²

Similarly, while the embedded videos aid storyworld construction by revealing the author's physical appearance and voice, by the same token, they obstruct immersion. Identification is made easier through a transparent mediator; photographs and videos highlight "otherness" rather than similarity with the autobiographical author. Moreover, the embedded videos demand a switch in the mode of interaction from reading to listening and watching. Consequently, the reader's interaction with the text is an experience of engagement, constantly negotiating meaning and calling up different schemas to make sense of the text. *daddylabyrinth* fosters engagement not only interactively, but also nonverbally, by manipulating typeface and layout in unusual ways as part of world building. For instance, in "Long Empty Waits," a series of left-aligned paragraphs is broken by a single sentence and a paragraph. The sentence, in bold typeface, refers to his father's demise with a forceful but shocking admission: "**We were all better off**" (emphasis in original). However, a meek addition follows in smaller font, right-aligned: "Still hurts to say that, but it's true." This break with convention allows Wingate to convey emphasis and tone, signalling how the text should be "read aloud" in the reader's mind and making the author more present to the reader.

This text does not absorb the reader into the stream-of-consciousness narrative as *Memorial* does, but overturns convention by unexpectedly breaking the "fourth wall" that separates the diegetic storyworld from that of the reader. Two examples make this point. In the first, Wingate reflects on the author-reader relationship, revealing how he envisions people connecting with his life story:

[T]hough technology can be incredibly distancing, narrative technology like the one you're using right now offers a deep communion between author and audience. Art has always been about two people meeting; more specifically, it's about the experience of the uncertain places in me meeting the uncertain places in you. Together, we have a human experience that unites our uncertainty, and we become one. ("A Theoretical Interlude")

²² This contrasts with the reader's easy emotional identification with the narrator of *Memorial*.

Paradoxically, of course, the above passage already fosters engagement rather than immersion because it demands self-reflexive meta-cognition by foregrounding the reader-author relationship, precluding the immersive experience of “becoming one.” Nevertheless, by acknowledging the reader as reader, *daddylabyrinth* opens the way for a shared reflection on wider issues of life stories and vulnerability.

The invitation to a shared human experience is extended in earnest in “Dead End No. 1,” despite the fact that Wingate subverts expectations of the confessional-autobiographical genre. Instead of simply opening a window into his soul, he throws the autobiographer’s existential questions back at the reader:

This is a dead end. It’s a great time to turn around and ask yourself some questions. For instance:

Did you end up where you thought you’d end up? In life, I mean, not in this book. If you haven’t ended up where you wanted, how much time have you wasted in self-recrimination? And if you have ended up where you wanted, how much time have you wasted castigating yourself for not having gotten there sooner, or in grander fashion? (“Dead End No. 1”)

While this unexpected challenge to self-examination undoubtedly breaks the reader’s immersion in the story, it also indirectly puts the reader in the author’s shoes. Empathy is sought in dialogue, not by asking the reader to feel as the author himself felt in a particular instance, but from the reader’s acknowledgement that similar existential questions arise for him/her. The call to autobiographical self-investigation makes the reader view the world through the same lens of existential seeking, allowing him/her to then cognitively (and perhaps affectively) empathize with the questions Wingate is asking.

Despite the distancing that occurs with engagement, certain parts of the work do allow for a more immersive reading experience, owing to Wingate’s compelling writing style. Among the frequent variations in narrative voice, are moments when the authorial voice suddenly slips, *Memorial*-like, into a plaintive, introspective mood which belongs more to the interior space of thought than to a public conversation: “Where were you dad? Why did you go away and leave me with the defaults?” (“Never Man Enough”). These and other similar confessional moments throughout the work are the key source of affective empathy in the text, when the author muses on childhood memories and what things might have been like were his father still

alive today. The result is a text that alternates frequently between immersion and engagement, but more often the latter.

Immersion in *daddylabyrinth* results from Wingate's absorbing writing style, rather than the multimodal elements. While texts and photographs easily combine to provide a coherent narrative, the videos and navigational tools work against immersion by breaking the reader's train of thought. Because of the prominence of functional and explicit interactivity in *daddylabyrinth*, the moments of immersion or transportation in *daddylabyrinth* give way to engagement often during the course of reading, resulting in a work that feels playful because it constantly breaks out of established schemas. Empathy is evoked not by a single stream of consciousness, but more cognitively, by inviting the reader to dialogue with the author's existential questions as a fellow sojourner on the journey of life.

Structure and Meaning in *daddylabyrinth*: Networked Confusion and the Endless Coda

Hypertext structure greatly influences the reader's experience of *daddylabyrinth*. Wingate identifies two metaphorical labyrinths that underlie his work (his father and his own fears of becoming like him are the monsters that need slaying), but it is a third one the reader interacts with: the literal hypertextual labyrinth. In formal terms, this consists of the elements that make up *daddylabyrinth*: hypertext structure, words, graphics, visual layout, videos, hyperlinks, and the characteristic of interactivity, which undergirds the reader's whole experience of the work. In terms of content, it consists of the author's reflections, thoughts and memories. Fundamentally, *daddylabyrinth* is an interactive metaphor that the reader enters, one in which s/he is occasionally immersed in reading personal reflections and sometimes abruptly jolted from immersion to engagement, such as when the flow of reading is interrupted by the author's interrogations, by the necessity of choosing a link to follow, or when faced with an unexpected dead end.

Although engagement with the text often overtakes the immersive experience, the overarching metaphor of the labyrinth gives a sense of continuity and aids in sense-making. The reader gets a sense of "what it's like" by engaging in the interactive metaphor of the labyrinth as a mirror of the author's mind. The reader is allowed to wander in this mental labyrinth, and to construct the life story fragment by fragment, picking a way through the chaos of real and reconstructed memories, competing interpretations and what-ifs, to build up eventually a portrait of the autobiographical author and his father.

Yet there are important differences between *daddylabyrinth* and a real labyrinth (whether physical or psychological): the hypertext allows readers to “leap over walls” and choose where to go, permitting random access and giving the reader navigational control. While encouraging the reader to wander and “Get lost!” its multiple navigational tools save the reader from the inconveniences of actually getting lost. It would therefore be more accurate to call *daddylabyrinth* a hybrid metaphor, evoking both a maze and the brain, with its networks and multiple associative links.²³ To enter the labyrinth of Wingate’s consciousness through his memories and stories, therefore, is also, in a way, to enter the labyrinth of his brain. The synaptic cerebral network of the biological brain is mirrored onto the interior labyrinth of interconnected thoughts, musings, and emotions of the author, and these are mapped onto the work by interconnected nodes and multiple hyperlinks.

Like the brain’s neural networks, the vignettes are interconnected associatively, resulting in “synaptic reading.” The episodic, self-contained structure of each node, as well as the author’s instructions, indicate that the work is not ideally read from beginning to end, but “synaptically,” so that the reader takes part in constructing his/her own experience of the text. Visiting *daddylabyrinth* at different times results in different pathways taken and different facets of the story being revealed.²⁴ Moreover, the fragments of different text types lend the text polyvocality: short stories by the author, poems, rantings, and letters are reproduced as are literary works by his father and factual vignettes about people involved in his father’s life, such as the military officer his father disobeyed (“Who Was Charles V Ickes?”).

Synaptic reading, by allowing the reader to wander, rather than follow a single logical path, makes for a relatively disjointed reading experience, but this also contributes to the sense of being on a meandering quest whose destination and end are unknown. Synaptic reading, like surfing Wikipedia, is an inherently open-ended endeavour. Like *Memorial*, *daddylabyrinth* is “exploratory” rather than “ontological,” since the reader’s actions do not change anything in the plot of the storyworld, but reveal new facets of the story to the reader. The reader is not shown a particular path to take, despite a plethora of options being made available. The lack of guidance also mirrors the author’s experience with life’s uncertainty—a running theme in the work—so that the reader, like him, has to take a guess at trying to make the right

²³ Wingate himself makes several references to synaptic reading and writing in *daddylabyrinth*, in “A Theoretical Interlude” and “Follow the Strand,” and expounds on this in his recent article “On the Interactive Digital Lyric,” which we have mentioned earlier.

²⁴ Wingate found that readers often also choose links based upon their personal circumstances (“On the Interactive Digital Lyric”).

move (only to find out that there are no right or wrong moves in the story; life, like the *daddylabyrinth* hypertext, is self-constructed).

Ironically, however, the navigational tools, by offering more options to interact with, compound this uncertainty so that *daddylabyrinth*'s interface sometimes almost overwhelms with too many choices: three sets of navigational tools are available to guide the reader (chapter links in the left frame, links to the main page of the same path or to pages within the path, and the forward and backward buttons that allow direct access to adjacent pages). In addition, various forms of visualization (radial, index, paths, tags) are afforded the reader who can at any time wander into a visualization and select a page at random. To take an example, the "paths" visualization in fig. 3 shows how hovering over a square reveals links to other nodes and paths (shown by the dotted lines), revealing the structure of the hypertextual labyrinth. The networked structure and size of the work force the reader to make constant choices. The need for making choices creates some uncertainty and places cognitive demands on the reader, who has to make decisions and may be distracted by the "what-ifs" of following this path instead of that one.²⁵

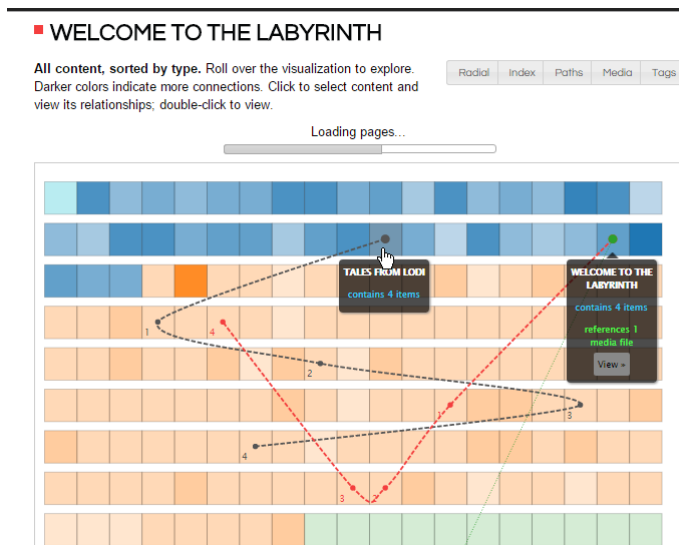


Fig. 3. Index visualization in *daddylabyrinth* showing links between nodes

²⁵ This is the effort, argues Mangen that prevents immersion in a hypertext.

The plethora of associatively linked options available for clicking at any moment also encourages the sense of indeterminacy and uncertainty the autobiographical author reflects in the text: the reader can wander endlessly through Wingate's ruminations and gain insights into the life story without ever seeming to make clear progress or to reach a conclusion. The text is inherently and permanently open-ended. Although a need for closure leads Wingate to provide a conclusion, he admits freely that it is an ending without an ending: the final chapter is titled "The Endless Coda." Moreover, the ostensibly final node of this last chapter announces its status by declaring, "As soon as I shot this, I knew it had to be the last word . . ." and ends with the phrase, "And so it was. . . ." ("The Vancouver Walk"). This node wistfully evokes a fairytale ending, signaling a conclusion to the story. Yet, despite his own express desire and perhaps in a typically playful spirit, Wingate gives his own conclusion the lie: "The Vancouver Walk" (updated 3 July 2014) is followed, a year later, by *another* node, "Balance Day" (added 30 November 2015). This trivial fact underscores the notion that the story will never be finished, as long as the autobiographer is alive, and hence the hypertext, as a mirror of his life, too, remains (at least potentially) permanently open and unfinished, perennially alterable.

The hypertext labyrinth metaphorically mirrors the experience of the autobiographical author of *daddylabyrinth* by mapping his interior world onto the networked hypertext. The multimodal fragments, linked by association, allow the reader to create a meandering path through the labyrinth (while facilitating narrative construction by offering navigational tools). Like the author's life experience, the narrative is necessarily open-ended and indeterminate; the lack of a clear "default path" also recognises the author's uncertainty and anxiety about life, allowing the reader to empathize through the process of engagement rather than immersion.

At the level of metaphor recognition, cognitive empathy rather than affective empathy is evoked as the reader is made explicitly aware of the metaphor in the text, highlighting the work's structure over attention to its content. Nonetheless, affective empathy also arises from engagement: the collage of multimodal small stories allows the reader to engage in perspective taking and to imagine what it must be like to be the author, and the reader's action of wandering uncertainly through the text without a clear path indirectly creates a sense of "what it's like" for the author facing the existential uncertainties of life. Although the reader is often engaged rather than immersed, as pieces of story build up the reader comes to know the author well enough to empathize with him, not just cognitively but affectively as well.

Conclusion

In *Memorial*, Megill refers to his brother's "beautiful empathy;" *daddylabyrinth* likewise ponders how vulnerability enables us to connect with and understand others. The two hypertexts show that interactivity, through engagement and/or immersion, evokes cognitive and/or affective empathy in different ways. Generally, immersion in an authorial stream-of-consciousness results in affective empathy, while putting the structure of the hypertext at the forefront of reader attention promotes engagement, making it more likely that cognitive empathy results (though this does not preclude some level of affective empathy as well).

Thus, certain conditions do seem to favor immersion and affective empathy, by smoothing the hyperlink transitions and enabling the reader to enter easily into the narrative stream-of-consciousness. If engagement rather than immersion is facilitated, cognitive empathy may still result. *daddylabyrinth* shows that a high degree of engagement results in primarily cognitive empathy, alternating with moments of affective empathy that arise from a relationship with the autobiographical author that is fostered over the process of reading the work. Thus both immersion and engagement can be effective in helping foster narrative empathy in readers of hypertext life stories.

Our focus on formal strategies here, however, should not cause us to ignore other decisive factors that influence empathy, such as the receiver's personal qualities, circumstances and disposition. Ultimately, empathy as a human connection can be evoked only by people willing to be open to the experience of understanding the other; no amount of narrative strategizing can secure the occurrence of an empathic moment. Future work could explore other instances of cognitive and affective empathy, including situations in which attempts at evoking empathy clearly fail, in order to better understand the conditions for evoking narrative empathy interactively.

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About the Authors

Evelyn Chew is a PhD candidate in the Department of Communications and New Media in the National University of Singapore (Singapore), where she also attained her BA (Hons.) in English Literature before obtaining her MA in International Communications from Macquarie University (Sydney). Her research focuses on subjective experience in digital interactive life stories. Publications, co-authored with her supervisor, include “The Impact of Interactivity on Truth Claims in Life Stories” in the interdisciplinary journal *DIEGESIS* 4.2 (2015), and a chapter on interactively re-creating subjective experience in video games in the edited volume *Subjectivity across Media: Interdisciplinary and Transmedial Perspectives* (forthcoming).

Alex Mitchell is Assistant Professor in the Department of Communications and New Media at the National University of Singapore. His current research investigates various aspects of computer-based art and entertainment, focusing in particular on interactive stories. His recent publications include “Defamiliarization and Poetic Interaction in Kentucky Route Zero” in *Well Played Journal* 3.2 (2014), and “Rereading and the SimCity Effect in Interactive Stories” in *Interactive Storytelling* (2015). He was the general chair for the International Conference on Interactive Digital Storytelling (ICIDS) 2014, and is a member of the ICIDS steering committee.

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