



*Routledge Interdisciplinary Perspectives on Literature*

# READING DIGITAL FICTION

NARRATIVE, COGNITION, MEDIALITY

Alice Bell and Astrid Ensslin



# Reading Digital Fiction

*Reading Digital Fiction* offers the first comprehensive and systematic theoretical, methodological, and analytical examination of digital fiction from a cognitive and empirical perspective. Proposing the new concept of “medial reading”, it argues for the centrality of an audience’s interest in, awareness of and/or attention to the medium in which a text is produced and received, and which we argue should be applied to reader data across media. The book analyses and theorises five generations of digital fiction and their reading, including hypertext fiction, hypermedia fiction, narrative video games, app fiction, and virtual reality. It showcases medium- and platform-specific methods of qualitative reader response research across a variety of contexts and settings from screen-based and embodied interaction to gallery installation, and from reading group and individual interview to think-aloud methodologies. The book thus addresses the unique affordances of digital fiction reading by designing and reporting on new empirical studies focusing on hypertextuality, interactivity, immersion, medium-specific forms of textual “you”, ontological ambiguity, reader orientation, and empathy. In so doing, the book refines, critiques, and expands cognitive, transmedial, and empirical narratology and stylistics by placing the reader of these new narratives front and centre.

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# 1 Introduction

## Digital Fiction, Empirical Research, and Medial Reading

### Introduction

Digital media offer writers and programmers a whole array of interactive, multimodal tools with which they can build narratives for readers and players to explore. Each of these tools, whether third-party or handmade, brings with it a distinctive set of material and aesthetic affordances, which significantly shape both authoring and reading processes. A reader of a hypertext fiction faces a two-dimensional, mostly text-based network of nodes, or text windows, which they navigate by clicking on hyperlinks. A radically different experience is offered by VR fiction, which immerses us in a fully rendered, 360-degree environment that is replete with multimodal information and multisensory stimuli that phenomenologically resemble our physical environments. Reading in digital media is therefore always platform dependent and materially embodied in the distinctive technological environment within which readers experience digital narrative. In this book, we show how and why these medium- and platform-specific contingencies need to be taken into account alongside transmedial narrative phenomena when we seek to understand reading digital fiction specifically and literary media more generally as a cognitive, embedded, and embodied process.

This book makes key contributions to cognitive and transmedial narratology, stylistics, empirical literary studies, and digital media scholarship by investigating the way that readers cognitively process an emergent yet fast-evolving form of interactive, computer-based narrative: digital-born, literary, and ludic narrative media, or *digital fictions*, which combine forms of written, oral, cinematographic, aural-acoustic, animated, ergodic-interactive, and ludonarrative storytelling. More specifically, digital fiction is “fiction written for and read on a computer screen that pursues its verbal, discursive and/or conceptual complexity through the digital medium, and would lose something of its aesthetic and semiotic function if it were removed from that medium” (Bell et al. 2010). It is a form of experimental

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fiction whose structure, form, and meaning are dictated by the computational context in which it is produced and received. It includes works of hypertext fiction, web-based multimedia fiction (typically produced using HTML5, CSS, JavaScript, and historical technologies such as Flash and QuickTime), Interactive Fiction (IF), app fictions for tablets and smartphones, videogames that have a strong narrative element, social-media fiction, AI-based fiction, and narratives created in augmented and virtual reality (AR/VR).

Semiotically, digital fictions may be entirely text based, involving written language only, or they may combine verbal narrative with other semiotic modes such as sound, image, animation, and/or film. Typically, yet not exclusively, digital fictions can be read, played, or experienced in multilinear ways, and readers often make choices about their journey through the text or storyworld by, for example, following links or responding to textual or visual prompts from the work. Readers are therefore involved in the construction of these multimodal narratives and must interact throughout the reading experience. Digital fictions are examples of the broader category of electronic literature, an umbrella term that comprises a multitude of experimental, verbal art forms across platforms, software applications, and aesthetic styles (Rettberg 2019; Tabbi 2018). Unlike more poetically and/or conceptually oriented forms of electronic literature, such as generative, kinetic, and hypertext poetry for example, digital fiction offers primarily narrative experiences with a strong emphasis on plot, character, setting, and narratorial functions. Digital fiction seeks to explore new, medium-specific, and transmedial forms of narrative expression and engagement and therefore simultaneously continues and disrupts the history of prose writing (see Ensslin & Bell 2021).

### Six Generations of Digital Fiction

One of the earliest forms of digital fiction is Interactive Fiction (IF), also called text adventure games. IFs were a highly popular type of interactive reading game in the 1970s and 1980s, with seminal works such as Infocom's *Zork* (1980), and continued to be produced throughout the 1990s and into the twenty-first century by prolific authors such as Emily Short and Adam Cadre. Typically, IFs use the second person to describe a fictional world in which the player is a character – the “you” of the narrative. The reader must enter text commands in response to fragments of text displayed on screen with the commands then generating more of the story.

From the late 1980s, hypertext fictions were developed. In all kinds of hypertext fiction, readers follow hyperlinks which lead them to different parts of the text. While a finite number of hyperlinks exist within a text, thus setting limits as to its structural organisation, readers are ultimately

responsible for their journey through the text and thus partially determine the order in which the story is unveiled, with some structures resulting in multilinear narrative contradictions. Pre-web, hypertext fictions, such as Judy Malloy's (1986) *Uncle Roger*, John McDaid's (1993) *Uncle Buddy's Phantom Funhouse* and Shelley Jackson's (1995) *Patchwork Girl*, were produced in early programming languages like UNIX and BASIC, as well as standalone software such as HyperCard and Storyspace. They were largely text based or else used greyscale images as afforded by the technology. From the mid-1990s, web-based hypertext fictions, such as Caitlin Fisher's (2001) *These Waves of Girls* and Kate Pullinger et al.'s (2010) *Flight Paths*, take advantage of web technologies such as HTML, JavaScript, and Flash. Like pre-web hypertexts, these narratives require that the reader engages with the digital technology both corporeally and cybernetically, through mouse clicks, and cognitively, by making decisions about their journey through the text. However, authors of web-based fictions were able to access a wider range of tools, leading to digital fictions that combine verbal text with graphics, pictures, animations, and music.

Hayles (2008) defines the affordances of digital fiction in terms of a shift between first-generation hypertexts and second-generation hypermedia. While the first generation, exemplified by Storyspace hypertext fiction, can be defined largely in terms of the link-lexia structure, the second generation of digital fiction, typified by web-based works, has evolved with technology to contain more sophisticated and semiotically varied navigational interfaces. Extending this typology, Ensslin (2007) defines the third generation as "cybertexts ... which are characterised by a gradual transfer of control from user to machine, leaving the former increasingly powerless" (10). This third generation, exemplified by Stuart Moulthrop's *Hegira-scope* (1995) and Urs Schreiber's *Das Epos der Maschine* (1998), drastically reduce or remove any agency granted to the reader so that the autonomy of the machine code is foregrounded. The shift to the third generation reflects emergent digital culture during the maturation of the videogame industry in the 1990s, which augmented the competitive relationship between player and game engine, on the one hand, and the rise of AI in generative (verbal) art on the other. So-called literary games (Ensslin 2014), such as Andy Campbell's and Judi Alston's (2015) *WALLPAPER* and Jason Nelson's (2008) *game, game, game and again game*, can be subsumed under the malleable category of cybertext as well, insofar as they blend narrative and poetic play with rule-based gaming and algorithmic experimentation in disruptive and often provocative ways.

Representing what Rustad (2012) defines as the fourth generation of digital fiction, social media narratives utilise the participatory affordances of Web 2.0 technology to allow readers to interact with and co-construct stories on social media platforms (see Ondrak 2018). *The Sun Vanished*

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(Elliott 2018–) and *I Work for the Web* (Wittig & Marino 2015), both published on Twitter, allow readers to respond to questions and/or calls for help from protagonists as well as discussing the nature of the narratives as they unfold. The Instagram Zine *Filter* (2021–) profiles electronic literature for Instagram including works such as *I Got Up 2020, Pandemic Edition* which uses the multimodality and sequentiality of Instagram to “document home confinement during the COVID-19 pandemic from June 2020 to May 2021” (burrough 2021).

Flores’ (2019) notion of third-generation electronic literature bypasses Ensslin’s concept of physio-cybertext and also conflicts with Rustad’s definition of social media fiction. In addition to literature in “social media networks”, Flores defines it as literature that uses other “established platforms with massive user bases such as ... apps, mobile and touchscreen devices, and Web API services”. His conceptualisation of third-generation literature thus merges various technologies based on their potential audience size as opposed to their respective technological affordances and “artisanal” qualities (Berens 2019).

It is important to note that these generations are not necessarily as distinct as the terminology might imply. After all, the use of multimedia, game-like features and other generation-defining features, is a matter of degree rather than kind and, as a form of experimental writing, digital fiction plays with established forms as well as generating new ones. Moreover, one generation does not replace another. First-generation hypertexts are still being written today, albeit using the platform Twine rather than being published on data carriers (see Ensslin & Skains 2017). However, in more recent years digital fiction authors have continued to experiment with new hardware and software, creating participatory narratives in mobile, collaborative, and/or deeply immersive environments.

What we define as the fifth generation of digital fiction, app fictions such as Steve Jackson’s (2014) *Sorcery!* and Tender Claws’ (2015) *Pry*, are experienced on smartphones or tablets with readers navigating these texts using the touchscreen. Much like pre-web and web-based hypertext fiction, readers navigate the fictional world via text-based multiple choices and/or as an avatar navigating a 3D space. App fictions can also come in a variety of aesthetic, technological and transmedial forms. For example, they can be locative, as in Eli Horowitz, Matthew Darby and Kevin Moffett’s (2012) *The Silent History*, whose Field Reports embed readers’ participatory GPS-tagged narratives; they can be ambient, such as Kate Pullinger’s (2018) *Breathe*, which uses APIs to integrate reader data into the storyworld itself; they can integrate augmented reality, as in Aaron Reed, Jacob Garbe, and N.J. Apostol’s (2016) *The Ice-Bound Concordance*; and/or they can manifest across media, such as Eli Horowitz and Russell Quinn’s (2015) *The Pickle Index*.

Finally, we suggest the sixth generation of digital fiction is a newly emerging and highly immersive form of digital fiction which involves first- or third-person avatar navigation through three-dimensional worlds: VR fiction. Produced in virtual reality and involving 360-degree, head-tracked interaction and navigation through 3D worlds, VR fictions use technologies such as HTC Vive and Meta Rift/Quest to make what was once a “castle in the air” for narrative (Ryan 2015: 35) a viable and increasingly more affordable form of storytelling. Some VR fictions, such as *Dear Angelica* (Oculus 2017), allow readers to enter a 3D fictional world passively in a cinematic-type experience by viewing and listening to a story. Others, such as Mez Breeze and Andy Campbell’s (2018) *Perpetual Nomads*, offer a more active experience by allowing readers to contribute to the story by solving mysteries or influencing their journey through the storyworld. While some VR fictions can also be defined as a cybertext, insofar as they blend narrative and poetic play with rule-based gaming, we argue that the hardware-specific nature of this deeply immersive and reader re-embodiment form of digital fiction warrants its own generational category.

### Digital Fiction, Readers, and Three Waves of Scholarship

Irrespective of the software or hardware used to produce digital fiction, theorists have always sought to understand the relationship between the texts and readers. In the first wave of theory that accompanied first-generation hypertext fiction, poststructuralist textual models were deployed to conceptualise hypertextual forms, structures, and associated readerly effects. Since readers can choose which links to follow in a hypertext, they were considered “co-producers” of the text, and thus Barthes’ (1990 [1974]) notion of the “readerly” text was invoked as a comparable model (e.g., Moulthrop 1991b; Landow 1994). Because of its unfixed electronic form, hypertext was also compared to Derrida’s (1981) decentered text (e.g., Bolter 1991) and conceptualised as an embodiment of Deleuze and Guattari’s (1988) rhizome (e.g., Landow 1994). It was also seen as a medium which might facilitate Cixous’ (1991) *l’écriture féminine* because of the fluid structures and unstable boundaries that it permits (e.g., Landow 2006). In the first wave of scholarship, readers were also often situated in a binary relationship with their print counterparts (e.g., Douglas 1994) with digital writing conceptualised as something that would liberate the reader from what Coover (1992) proclaimed was the “tyranny of the line” that had previously constrained readers of print.

While conceptually alluring, the first wave of scholarship does not offer systematic ways of analysing individual texts or provide insight into how readers process them. As a means of addressing these gaps, a second wave of digital fiction research, which is not specific to a particular generation of



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digital fiction but instead spans the range, shifts the emphasis of scholarship towards applying replicable analytical tools and frameworks to individual digital fiction works (e.g., Bell et al. 2014; Bell 2010; Ciccoricco 2007, 2015; Ensslin & Bell 2021; Punday 2019). Analysing the linguistic, narratological, multimodal, and/or interactive devices at work in a range of digital fictions, second-wave scholarship has focussed on areas such as narrative voice (e.g., Bell & Ensslin 2011), narrative perspective (e.g., Ciccoricco 2012), fictional dialogue (Thomas 2007), immersion (Ryan 2015), hyperlinks (e.g., Bell 2014), literary ludicity (e.g., Ensslin 2014), and user interface (Punday 2014). Because this kind of scholarship often utilises theoretical models and analytical frameworks from cognitive narratology and/or stylistics, there is an inevitable disciplinary focus on the reader's relationship to the texts and the fictional worlds they construct, thus providing new analyses of individual texts and new theoretical understanding about how readers process textual features (see Bell et al. 2014). Significantly, however, second-wave research uses the analyst's introspective, scholarly response (as an exemplary reader) or hypotheses about the attitudes and experiences of a theoretical reader as opposed to collecting data from a wide range of readers from diverse backgrounds. As a result, second-wave analyses inevitably present a necessarily limited point of view, driven by the analyst's individual biases and theoretical lenses, rather than a broader picture of reading as a multidimensional, individually embodied and embedded process that nonetheless produces certain shared meanings between individuals.

Reflecting the "empirical turn" (Bell et al. 2021) within literary studies more broadly, in which data are gathered from readers to investigate the way that they cognitively process texts, we observe what we define as a third wave of digital fiction research (cf. Bell et al. 2018), in which scholars seek to empirically investigate digital fiction reading by collecting and analysing reader responses to individual texts using both qualitative and quantitative data collection methods. Like the second wave of research, the third wave is not aligned to a specific generation of digital fiction but instead began with isolated investigations of hypertext fiction before burgeoning out to other forms. Gardner (2003), for example, uses individual responses to Joyce's (1987) hypertext fiction *afternoon, a story* alongside the analysis of reading speed and mouse movements to show "ways that textual elements may have influenced or determined readers' choices and the ways that readers' choices 'configure' the text" (33). He thus develops a "meta-interpretative method" of analysis for hypertext fiction that accounts for and remains faithful to its multilinear and thus unstable structure. Pope's (2006, 2010) study likewise seeks to understand how readers read hypertext fiction, but he focuses on the features that cause enjoyment of or difficulty with such texts, concluding that the choice that hypertext reading permits was the source of some irritation or bewilderment for

many participants, sometimes leading to “a lack of involvement and reading absorption” (2010: 84, cf. Miall & Dobson 2001).

Gardner’s and Pope’s empirical work is important for pioneering new research methods for digital fiction scholarship and developing insights into readers’ responses to the multilinear affordances of hypertext fiction in particular. However, it attends largely to the structural and interactive affordances of the hypertexts under investigation and, while these are important for and integral to digital fiction reading, this focus alone does not account for the literary features that also form a fundamental part of hypertext fiction as well as other digital fiction reading experience.

Outside the field of digital literary studies, researching the way that readers cognitively process the narrative and/or linguistic features of texts is fundamental to the disciplines of cognitive narratology (e.g., Bernaerts et al. 2013; Herman 2002) and cognitive stylistics (e.g., Stockwell 2020; Brône & Vandaele 2009; Gavins & Steen 2003) respectively. Utilising insights from cognitive psychology and cognitive linguistics, both disciplines rest on the premise that cognition is embodied and experiential. Embodied cognition (Borghi & Cimatti 2010) refers to the idea that the mind is “grounded in the details of its sensory-motor embodiment” and that cognitive processes are “the product of a dynamic interplay between neural and non-neural processes” (Foglia & Wilson 2013: 319). These processes are in turn embedded in everyday real-life contexts, which significantly shape human perception and the processing of information, including aesthetic and narrative stimuli. Hence, contemporary cognitive stylistics and narratology reflect the embodied and situationally embedded qualities of language and communication (Healey & Gardner 2021), which come to the fore in the diverse materialities of reading across media.

Research within cognitive narratology and cognitive stylistics has recently seen an increase in empirical studies which seek to understand the way that readers process texts in print (e.g., Alber & Strassen 2020; Peplow et al. 2015), and empirical research on other narrative media is also emerging (e.g., Bell et al. 2021). This includes research in what Swann and Allington (2009) present as two opposing paradigms: “experimental” versus “naturalistic” approaches, with Peplow and Carter (2014) making a similar distinction between “the empirical study of literature” and “the naturalistic study of readers”. According to this disciplinary distinction, experimental studies aim for maximum experimental controls, test hypotheses, often – but not always – use quantitative methods, take place in a tightly controlled setting – usually in a laboratory with a researcher present – and may involve some manipulation of the text to isolate particular features and/or statistically analyse results (e.g., Sanford & Emmott 2012). Methods associated with experimental approaches in literary studies include interviews (e.g., van der Bom et al. 2021; Mahlberg et al. 2014);

think-aloud protocols (e.g., Andringa 1990; Browse 2021); questionnaires (e.g., Kuiken et al. 2012; Alber et al. 2020); text comprehension tasks (e.g., Zwaan 2004); Likert scales (e.g., Bell et al. 2019); and eye-tracking (e.g., Parente et al. 2019). Naturalistic studies, on the other hand, seek maximum ecological validity by presenting texts in their original form, using readers' discussions about texts in their usual environment, and minimising researcher intervention. Verbal data are thus gathered from (usually in-person) reading groups (e.g., Whiteley 2011; Peplow et al. 2015; Bell et al. 2018), which are "collective(s) who meet regularly to discuss a book that all members (should) have read" (Peplow 2016: 1) and/or internet-based discussions or review sites (e.g., Nuttall 2017, Whiteley 2016). Data are almost always analysed via qualitative methods and sometimes include ethnography (e.g., Benwell 2009). While experimental and naturalistic approaches are generally characterised as representing two opposing paradigms, it is important to note that there are also examples of empirical research that combine the methods typical of each; questionnaires, for example, can be used to elicit data about a text which has been read in its original format (e.g., Kuijpers et al. 2014).

Clearly, both naturalistic and experimental approaches have advantages and disadvantages for researchers, depending on the context. While naturalistic studies can claim to offer the most authentic experience insofar as they target readers in their usual environment, as Peplow and Carter (2014) note, "readers may not discuss the specific textual feature in which the researcher is interested" (449), so that, while the data may be plentiful, it may not actually be relevant for the original research aims. On the other hand, Hall (2008) has criticised experimental studies for researching readers and reading under "atypical conditions" (31) which may not "tell us about the phenomenon it purports to" (31). From this perspective, the data may be relevant to the research question(s), but it may not reflect a naturally occurring reading experience.

### **Our Medium-Conscious Reader Response Methodology**

The overall methodology that we offer in this book intrinsically combines the close textual analysis of both the primary text and reader data generated as a response to that text. We thus adopt the reader response approach advocated by Whiteley and Canning (2017) which

gives equal attention to the text and data evidencing the text's reception ... in order to contribute to a stylistic textual analysis and/or wider discussion of stylistic theory and method ... [and] enable the testing and development of stylistic methods and theories.

Whiteley and Canning's approach is anchored within print, text-based stylistics and does not pay attention to medial aspects of literary texts and their reception and interaction. In this book, we extend this remit and include integral narratological and medium-specific affordances of digital fiction in both the primary text and as spoken about in the reader responses.

Our methodology draws on Bortolussi and Dixon's (2003) psychonarratological distinction between "textual features", which are "objective and identifiable characteristics of the text" (37) and "reader constructions", which are "subjective and variable mental processes" as responses to the text (37). In our approach, reader constructions are identified via the analysis of individually and/or jointly negotiated responses to a text to show how readers have processed features from a digital fiction in its medium- and site-specific contexts. The textual features responsible for generating those responses are also examined via the systematic analysis of the multimodal, interactive, linguistic, and/or narratological elements in the text.

In terms of the data collection, we utilise methods from both the naturalistic and experimental paradigms with protocols designed to address the research aims of each study. However, our overall methodological approach is qualitative and thus one that highlights the many ambiguities of reading and interpretation (Patton 2002), placing particular emphasis on the discursive nuances with which individual participants "explain their experiences in regard to a particular phenomenon" (Mligo 2016: 8), while simultaneously aiming to seek patterns of shared experiences and understanding. As each study shows, the sizes of the datasets (ranging between 14 and 20 participants) were designed to capture an appropriate range of responses to the texts in question while also allowing deep and sustained qualitative interpretation of predominantly verbal data. In each study, we adopt purposive sampling which aims to gain "insights ... about the issue under study expected from specific participants (or groups)" (Flick 2018: 182). This approach meant recruiting participants from cohorts with experience of and/or interest in the material under scrutiny and the sampling decisions for each study are explained in the respective chapters.

For our analysis, in each case study we use NVivo, which is qualitative research software that facilitates the thematic coding of data. We adopt discourse analysis as a consistent approach to the thematically coded data to capture the way in which reading experiences are conceptualised and expressed in discursive-idiosyncratic ways across all five studies. As Brennen (2022) notes, "it is through our use of language that we make meaning and construct our own social realities" (2). Our principal focus is thus on what the participants' language use tells us about the way they conceptualise their reading experiences so as to enable "the classification and interpretation of linguistic (or visual) material to make statements about

implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it” (Flick 2014: 5). These discursive idiosyncrasies manifest in structural patterns and regularities in participants’ verbal and nonverbal interactions, but also the wider semiotic, site-specific, and cultural contexts within which these interactions are embedded (cf. Brandmayr 2020). Crucial to our analysis is also the application of a medium-conscious typology of response which seeks to capture the different foci of the participant data. From this we extend Peplow et al.’s (2015) discourse model of reading which they develop from reader responses to print fiction in order to capture the “ways in which readers in face-to-face reading groups invoke aspects of their own personal history and identity when discussing fictional texts” (62).

In their model, Peplow et al. (2015) draw on Phelan’s (2005) rhetorical narratological approach in which he argues that readers develop interests in and respond to three components of a narrative. In Phelan’s work, *mimetic* responses “involve an audience’s interest in the characters as possible people and in the narrative world as like our own” (2005: 20), more recently clarified by Phelan to include a “narrative’s imitations of—or references to—the actual world, including such matters as events following the cause–effect logic of the extratextual world, characters functioning as possible people or being representations of actual people, time and space following the known laws of physics, and so on” (Clark & Phelan 2020: 202).<sup>1</sup> This component thus focuses on the extent to which a text corresponds to the actual world and/or is believable. It includes “evolving judgements and emotions, our desires, hopes, expectations, satisfactions, and disappointments” (Phelan & Rabinowitz 2012: 7) about the characters and the storyworld. *Thematic* responses “involve an interest in the ideational function of the characters and in the cultural, ideological, philosophical, or ethical issues being addressed in the narrative” (Phelan 2005: 7). They thus relate to the reader’s interpretation of what the text is about thematically and/or what it means. Lastly, *synthetic* responses “involve an audience’s interest in and attention to the characters and to the larger narrative as artificial constructs” (20) and thus relate to the way that a narrative is constructed including the narrative devices that are utilised in a text. Importantly, as Peplow et al. (2015) note, “these three forms of reading are not mutually exclusive, and readers can move between them” (64). Thus, different responses can be provoked to a greater or lesser degree, depending on the type of text being read, and all three responses can be generated by the same text.

Applying Phelan’s framework to their corpus of reader response data gathered from naturalistic reading group discussions, Peplow et al. (2015) find empirical evidence of all three kinds of audience response, thus operationalising Phelan’s theoretical concepts in the context of reader response research (cf. Polvinen & Sklar 2019). While the focus of their analysis

means that mimetic reading dominates in Peplow et al.'s participant data, they note that “the interactive nature of reading group discourse” (88) affects the “talk produced by groups” (88) who each have “preferred ways of reading texts” (88) so that “the form of reading ... that predominates may well depend on the reading group being analysed and the text being discussed” (88). Implicitly, therefore, the type of text that is used in a reading group discussion has a significant bearing on what members of that reading group will likely focus on.

In further articulating Phelan's (2005) framework, Phelan and Rabinowitz (2012) explicitly note that genre in particular likely affects the responses that are generated by a narrative, suggesting that “so-called realist fiction ... [is] dominated by mimetic interests; ... allegories and political polemics ... stress the thematic; ... the *nouveau roman* and much postmodern meta-fiction put priority on the synthetic” (7). They thus hypothesise that texts belonging to a particular genre will stimulate a particular response in readers. However, neither Phelan nor Peplow et al. theorise or analyse the effect that medium might have on reader responses.

The medium naivety in most investigations of print reading is noted by scholars of digital literary media, who see medium as an integral and inevitable component of their scholarship.<sup>2</sup> Hayles and Pressman (2013), for example, propose an entire new “comparative textual media” approach which advocates the “*comparative study of all text-based media*, not only the digital” (xii; italics in original) across the Humanities. Such an agenda is needed, they argue, because “print itself is a medium, an obvious fact that tends to be obscured by its long dominance within Western culture” (vii). Yet while Hayles and Pressman note that Humanities scholars have not historically focussed on medium, Ryan (2006) observes that “it is almost an axiom of contemporary media theory that the materiality of the medium—what we may call its affordances, or possibilities—matters for the type of meanings that can be encoded” (17, cf. Hausken 2004). For scholars of narratives in digital media, attention to medium is usually an intrinsic part of the research process because it is assumed that mediality – that is, “the ‘medial qualities’ that can be attributed to various kinds of media” (Thon 2013: 334) – affects the way that a reader processes and responds to a text (see, e.g., Ciccoricco 2015; Ryan 2015; Ensslin & Bell 2021). From our perspective, mediality should be a variable in any study that seeks to determine the effect that a text has on a reader.

As a means of addressing the methodological gap in Phelan's and Peplow et al.'s frameworks, we propose the new category of “medial response” which we define as an audience's interest in, awareness of and/or attention to the medium in which a text is produced and received. This includes the medium-specific affordances inherent in the technologies used and their site-specific, embodied implications for reader-player interaction. Importantly, medial responses are related to but distinct from synthetic readings

of texts (Phelan). Synthetic responses focus on the linguistic style in which a text is written, and/or the narrative textual devices employed, including, for example, the type of narration, the temporality of the narrative, and/or metafictional textual devices. Medial readings of a text, on the other hand, relate to devices that are afforded by the material and aesthetic qualities of the medium in which the text is written. This includes, for example, paying attention to hyperlinks, cursors, and/or avatars in relation to digital fiction; paper and/or binding in relation to print; or sound effects and camera angle in relation to film. Clearly, some devices can be enabled across media – images, for example, can be used in both print and digital fiction. However, the aesthetics and functionality of each are determined by the affordances of the medium. Moreover, as with Phelan’s and Peplow et al.’s original frameworks, medial responses are not necessarily experienced in isolation from other kinds of response. A second-person address (synthetic) can be used in conjunction with a mouse click or screen tap (medial). Thus, as we will show throughout the chapters that follow, a reader’s medial response to a text reciprocally shapes and is shaped by their interpretation of the text’s ideational and philosophical meanings (thematic response), their interest in the text as creating a feasible world populated with meaningful characters (mimetic response), and/or their awareness of its textual, metafictional, and structural design (synthetic response). In the analyses that follow we also propose and analyse three new categories of response which are necessitated by the medium- and context-specific nature of the texts under investigation: automimetic response (introduced in Chapter 2), parasocial response (in Chapter 5), and ambimedial response (in Chapter 6).

The centrality of medium in our approach to “reader constructions” is also reflected in our approach to textual features. We draw on relevant theories, models, and frameworks from cognitive stylistics and cognitive narratology to analyse the stylistic and narratological features at work in a particular text. However, we also utilise insights from transmedial narratology and digital media studies to ensure that the effect of medium is also addressed in our analysis. We thus engage in what Hayles (2004) defines as medium-specific analysis, which is “a mode of critical attention which recognizes that all texts are instantiated and that the nature of the medium in which they are instantiated matters” (67). Within this book, this means analysing the distinct technological and phenomenological qualities exhibited by the digital fiction, but also showing how narratological and stylistic models that have been developed in relation to print need to be modified for their application to digital fiction (cf. Bell et al. 2014; Ensslin & Bell 2021). This includes the development of new theories, models, typologies, and methodologies to reflect the affordances of narratives in and beyond digital media. Our approach is thus both medium-specific and transmedial in terms of empirical and analytical practice and theory development.

Overall, in our new medium-conscious approach to reader response research, we pay attention to the discursive construction of readers' mimetic, thematic, synthetic, and medial responses and the medium-specific and transmedial elements in a text that are responsible for generating them. The new methodologies that we offer in the book are thus unique in addressing the medium-specific "reading" situations and environments associated with a narrative by combining second-wave analyses with third-wave empirical research to offer new theoretical, methodological, and analytical insight into digital fiction reading. Our findings contribute not only to our understanding of reading as a multimodal, transmedial, and medium-conscious process and medially embodied and embedded praxis, but they also inform contemporary theories of literacy, human-computer interaction, and the aesthetics of play.

### Chapter Summaries

In the chapters that follow, we focus on the way that readers engage with and cognitively process five different generations of digital fiction: web-based hypermedia fiction, standalone hypertext fiction, 3D immersive fiction (or "literary game"), app fiction, and VR fiction. The chapters capture what we consider the most central medium-specific elements of digital fiction, thus echoing existing formalist scholarship of digital narrative while simultaneously offering empirical insights into their cognitive implications. These elements include second-person narration (Harrigan & Wardrip-Fruin 2010; Montfort 2005), immersion and multimodality (Ryan 2015, 2001; Murray 1997), reader-character interaction (Murray 1997), hyperlinks (Landow 2006), as well as affective engagement and empathy – especially in relation to prosocial narrative game play (Isbister 2016; Chen et al. 2018) and VR narrative (Milk 2015).<sup>3</sup>

Chapter 2, "Second-Person Narration in Ludic Hypermedia Fiction", explores the way in which "you" is used in second-generation digital fiction and offers a new transmedial method for gathering reader responses to individual uses of "you". It begins by showing the ubiquity of "you" in digital narratives before outlining various typologies that have been devised to categorise "you" in print and digital fiction. The innovative methodology that we offer in this chapter utilises a tool that is usually associated with quantitative research – a Likert scale – but which we use to elicit qualitative data about the use of the second person. We offer the results of an experimental study on Deena Larsen and geniwate's (2003) hypermedia fiction *The Princess Murderer* – a ludic, web-based hypermedia fiction which utilises the second person to blend the identities of the fictional villain and the doubly embodied reader. We show ways in which readers accept, reject, and negotiate the characteristics associated with "you", add



new medium-specific and transmedial categories to existing typologies to explain those positions, and propose the new category of “automimetic response” to account for an audience’s interest in and response to the way in which a text’s representation of them as “you-as-reader” corresponds to them and/or is believable.

Chapter 3, “Hyperlinks in Hypertext Fiction”, explores the way in which readers respond to hyperlinks in a third-generation hypertext fiction and offers a new method for gathering reader responses to individual hyperlinks via a structured interview. It begins by engaging with existing theoretical and empirical research on hyperlinks in digital fiction, including work which has investigated their structural, semantic, and cognitive function. It then outlines the empirical study which was designed to examine the different types and associated cognitive effects of hyperlinks in the web-based hypertext fiction *The Futographer* by Lyle Skains (2017). We show how our think-aloud protocol is designed to capture reader engagement with hyperlinks in terms of deliberation and decision-making, provide an empirically based typology of hyperlinks for digital fiction, and suggest ways in which digital fiction readers employ specific cognitive strategies to parse multilinear hypertext narratives.

Chapter 4, “Immersion in Literary Games”, examines the way that readers are immersed (or not) in literary games. We engage with existing theoretical and empirical research on immersion across media and provide a new systematic approach to analysing immersive features in texts by utilising deictic shift theory. We utilise reading group discourse to show how readers individually and jointly negotiate their responses to Andy Campbell and Judi Alston’s (2015) 3D literary game installation *WALLPAPER*. We show that while current theories of immersion suggest that it is a completely absorbing experience, our data show immersion to be an intermittent process, stimulated by multiple immersive features which interact – a process we define in terms of a mixing console metaphor. In terms of theoretical contribution, this chapter amends deictic shift theory and adds three new forms of immersion – extratextual immersion, collaborative immersion, and literary immersion – to account for the multimodal and interactional nature of digital fiction.

Chapter 5, “App Fiction and the Ethics of Ontological Ambiguity”, examines the way that reader interact with characters in interactive digital narratives. We engage with transportation theories of reading/playing/viewing and suggest ways in which those models do not always capture the interactions made possible by digital fiction. We utilise reading group discourse and online reader reviews to show how readers individually and jointly negotiate their responses to Blast Theory’s (2015) app fiction *Karen* and its ontologically ambiguous protagonist. We focus on the interpersonal relationships that are formed between readers and characters as well as the ethics of such fictional involvement. We suggest that

ontological ambiguity is an inevitable part of personal interaction in digital media and provide the new concept of “parasocial response” to capture the way in which readers talk about the interpersonal relationships they form with characters.

In Chapter 6, “Orientation and Empathy in VR Fiction”, we engage with critical debates surrounding empathy and develop the theory of narrative empathy based on empirical VR reader research. In a study with readers of Randall Okita’s (2020) *The Book of Distance (TBoD)*, we argue that empathy should be seen as a fluid and dynamic spectrum of affective states (*Narrative Empathy Spectrum*) that integrates metacognitive reflection vis-à-vis authorial intent and is informed by the very contingencies at play in a narrative VR experience. We further explore aspects of medium-specific reading in VR and derive the concept of *ambimediality* from data that show the blending of multi-, inter-, and transmedial processing on the one hand, and the ambivalent and ambient contingencies of medium-specific reading in VR on the other. We further examine some of the key spatial and ontological parameters of *TBoD*, which lead to what we call the “Chalkline Effect” of *medium-specific spatial double-deixis*. Finally, we consider participants’ responses to the autofictional narratorial situation in *TBoD* and introduce the term *dual embodied metalepsis* to mark the cognitive conflation of author and narrator, and of reader and narratee amongst empirical respondents.

In the concluding chapter, “Medially Reading Digital Fiction”, we draw out topic-specific and general conclusions from the preceding chapters. We show that our data offer evidence of “medial reading” in relation to digital fiction and suggest ways in which that concept might apply in other media contexts. We conclude that empirical research on digital fiction necessitates the modification of narratological, stylistic, and reader models that have been developed in relation to print and show that qualitative empirical research is vital for eliciting data about how readers experiences texts across media, thus arguing for a transmedial approach to reader response.

## Notes

- 1 Phelan has recently revisited his thematic, synthetic, mimetic triad to redefine the relationships between the categories and to elucidate further what he defined as a “narrative world as like our own” in the original definition of the mimetic. The revisions that Phelan makes to his original definitions do not change the essence of the original framework and, since Peplow et al. also utilise the original definitions, we also engage with the original in this book for consistency.
- 2 See, for example, Gibbons (2011); Nørgaard (2019); Schaefer and Starre (2019) for medium-conscious approaches to multimodal print fiction.
- 3 Participant names were replaced with pseudonyms throughout to ensure anonymity.

## 2 Second-Person Narration in Ludic Hypermedia Fiction

### Introduction

We begin our investigation of medium-specific reading in digital fiction with one of the most pervasive narrative devices in digital fiction: the second-person pronoun, or textual “you”. By far the grammatically most malleable pronoun in the English language, “you” gives rise to semantic and referential ambiguity that lends itself to narrative experimentation. It can, for instance, be used to refer to a protagonist in lieu of a first- or third-person reference in what is generally called second-person narration, or to directly address the narratee or the reader/player in so-called apostrophic forms. Yet the semiotic and pragmatic flexibility of “you” far exceed these two default applications, and “you” can have radically different meanings and aesthetic effects depending on its medial and narrative embedding (Ensslin & Bell 2021). This chapter begins by showing the ubiquity of second-person narrative in digital fiction before outlining various typologies of “you” that have been devised to categorise second-person narrative in print and digital fiction. We then offer a new transmedial method for gathering reader responses to individual uses of “you”. The innovative methodology that we offer in this chapter utilises a tool that is usually associated with quantitative research – a Likert scale – but which we use to elicit qualitative data about the way that readers process the second person. We offer the results of a mixed-methods study on Deena Larsen and geniwate’s (2003) *The Princess Murderer* – a ludic, second-generation, web-based hypermedia fiction which utilises the second person to blend the identities of the fictional villain and the doubly embodied reader/player. We show ways in which readers accept, reject, negotiate, and reluctantly role-play the characteristics associated with “you”, and analyse the way that these positions dynamically affect reader engagement with the narrative. We offer a new cognitive model of reader self-positioning to account for these positions and thus provide a new way of classifying reader positioning in relation to “you” in interactive narrative.

### Digital Fiction and “You”

“You” is a referentially ambiguous pronoun. In English, it homonymically references second-person female, male, and neutral gender, as well as singular and plural addressees in a stylistically undifferentiating way (as opposed to different polite and casual forms of address in languages such as German and Spanish). It can also be used as a generalised pronoun replacing “one”. When used in a fictional context, it can position the referent of a “you” flexibly between virtual and actual, between intra- and extradiegesis, and between protagonist, characters, narrator, narratee, implied, and actual reader. It represents what Herman (2002) defines as a “special case of person deixis” (332), which, when used intermittently or consistently, produces a “storyworld whose boundaries can be probabilistically but not determinately mapped” (332). That is, because of its flexibility, “you” can refer to individuals whose ontological status is ambiguous and who thus might exist within or outside of a storyworld, or both.

Textual “you” features widely across digital, interactive texts. Interactive Fiction (IF), for example, employs the second person throughout, building the storyworld using present tense (e.g., *Zork*’s “You are standing in an open field [...] [Infocom]) and imperatives (e.g., *Zork*’s “You must specify a direction”), and creating the illusion of being present in a storyworld that is constructed by the reader in collaboration with the programmed text. In IFs, textual “you” thus informs the reader about the basic building blocks of the game world and allows them to co-construct this domain by inputting text commands in the hope of receiving more textual information (cf. Walker 2000). In IFs, then, textual “you” is the main character, role-played by the reader.

Many hypertext fictions employ textual “you” in the form of second-person narration as a means of drawing attention to and harnessing the reader’s somewhat unique function in the text. In hypertext fiction, the reader has an active role. They must move a mouse and click a button or type a response on a keyboard in order to learn more about the storyworld and its inhabitants. In Shelley Jackson’s (1995) *Patchwork Girl*, for example, the protagonist tells the reader “I am buried here. You can resurrect me, but only piecemeal”, with readers then required to choose links which provide information about the protagonist. The reader must move a mouse and click a button or type a response on a keyboard in order to learn more about the fictional world and its inhabitants, thus uniting the reader with the “you” of the address.

Second-person address is also used extensively in videogame discourse and the paratexts surrounding the primary artefacts (such as manuals, discussion fora, blogs, and gaming magazines). Primarily, videogames often use the second person to tell the protagonist/player what their mission is in

the game world (e. g., “You must rescue X from Y”). Unlike text-based IFs and hypertext fictions, however, in a videogame the player sees their alter ego embodied in the shape of an avatar, an object, vehicle, or simply a cursor that they can control, further cementing the relationship between the “you” and the player. As Harrigan and Wardrip-Fruin (2007) note, “you are the person for whom the story is being told” (xiv), with the “you” here filling the role(s) enabled by any chosen game’s avatar selection or customisation mechanism.

What the three preceding examples show is that in a digital context, being addressed as “you” is not particularly unusual and in fact might even constitute a medium-specific linguistic convention. After all, ubiquitous software programmes such as word processors, email packages, and social media platforms regularly address users using the second person (e.g., Microsoft’s “Save your changes to this file?”; Facebook’s “What’s on your mind?”). Yet the prevalence of “you” in digital media does not mean that it goes unnoticed or that readers/players/users always respond positively to being addressed in the second person. As this chapter will show, “you” can generate polarised responses precisely because its referent can be ambiguous and because it can claim to know something about its addressee(s) that readers find intrusive or otherwise unsettling.

### Theorising “You”

The referential and deictic ambiguity caused by “you” is reflected in narratological typologies and/or terminological distinctions that have been developed to account for the second person in both print and digital fiction. Most influential to narrative theory is Herman’s (2002) fivefold typology of narrative “you”, which tops the diagram in Figure 2.1.<sup>1</sup>

An important distinction that Herman makes is between “referential you” and “address you”, which, reflecting the complexity of the pronoun, he stresses, “differ in degree, not kind” (341). As the terminology suggests, “referential you” is used to refer to entities within the storyworld, and “address you” applies when “you” is used as a form of address to an entity either within or outside the storyworld.

“Referential you” can take a form in which “a protagonist who, as (intradiegetic) narrator, is also, over the course of the novel as a whole, her own intradiegetic narratee” (340). In this case, the narrator refers to herself with “you.” Herman gives the example of the narrator/protagonist of *A Pagan Place* reminiscing about his childhood and referring to himself in the second person. This is marked as “fictional reference” in Figure 2.1. Referential “you” can also be an “impersonal or generalized” (340) collective audience – what Furrow categorises as “the ‘pseudo-deictic’ *you*” (quoted in Herman 340) – that “often plays a prominent role

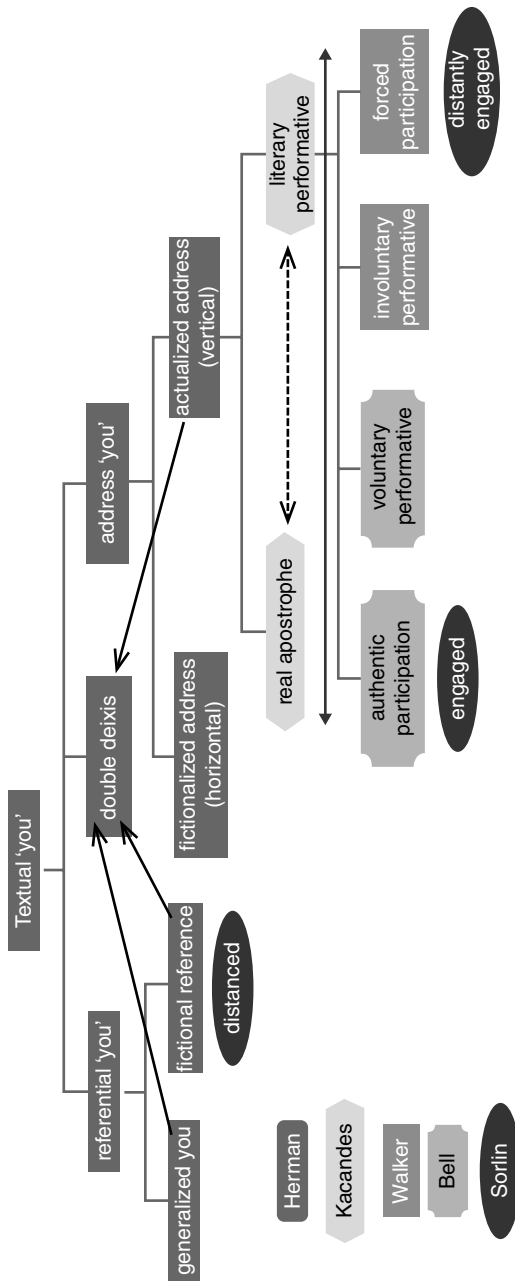


Figure 2.1 Combined typologies of narrative “you”

not only in ... literary narratives but also in ... proverbs, maxims, recipes, [and] VCR instructions” (340); this is marked as “generalized you” on the diagram.

Like “referential you”, “address you” is also divided into two subtypes: “*fictionalized* address, which entails address to or by the members of some fictional world ... and *actualized* address or apostrophe, which ... entails address that exceeds the frame (or ontological threshold) of a fiction to reach the audience” (341). In both cases, “you” is used to directly address an entity. However, in “fictionalized address” the communication takes place within the storyworld between two or more characters and is therefore classified as “horizontal”. Conversely, in “actualized address”, the communication exceeds the fictional frame – usually by addressing the reader – and is therefore classified as “vertical”.

Last, representing the most ambiguous form of the second person, Herman shows how “you” can be used to refer to both a fictional and a real addressee simultaneously, producing what he calls “double-deixis”: here “narrative *you* produces an ontological hesitation between ... reference to entities ... internal to the storyworld and reference to entities ... external to the storyworld” (338). Herman’s conception of this form of pronominal reference as “hesitation” might suggest that the referent of “you” moves back and forth between addressees. However, in elucidating this category further, Herman describes double-deixis as a “blend” (342), a “hybridized combination” (342), and, more frequently, a case of the “superimposition of deictic roles” (345), terms suggesting that “you” is simultaneously actual and fictional. The reader will thus always feel addressed by “you”, but, because “you” also refers to a fictional character, they will not be able to identify with the “you” completely. Thus, as Herman observes, the reader will find themselves “more or less subject to conflation with the fictional self addressed by you” (345).

As a theory that was chronologically developed before Herman’s, Kacandes (2001, 1993) cannot explicitly engage with Herman’s typology. However, drawing on Austin’s speech act theory, Kacandes implicitly refines Herman’s category of “actualized address” by distinguishing between “apostrophe” and “literary performative”. She suggests that readers cannot identify with most cases of fictional apostrophe because the characteristics of the “you” given in the text will rarely match those of the reader completely. However, as a special case of apostrophe, literary performative forms of “you” cause readers to inevitably perform what they are reading and thus become the “you”. As an archetype of literary performative, Kacandes gives the example “you are reading this sentence” (2001, 183). That she uses her own example as the archetype is significant. While Kacandes analyses several examples of “you” that initially fulfil the criteria of literary performative in postmodernist print fiction, she also

acknowledges that “literary performatives rarely occur in pure form i.e. as a statement that absolutely any reader can actualize by reading” (1993, 148), simply because the “you” ceases to be the reader as soon as attributes are added to it.

While literary performative “you”s are rare in print fiction, they form an important conceptual basis to digital instantiations of the “you” address. Indeed, in the context of digital narrative, Kacandes’s literary performative form of second-person narration offers itself most aptly to a number of interactive texts, the enactment of which relies on the reader/player’s response to directives embedded verbally or visually (or both) in the interface. From this point of departure, Walker (2000) subdivides Kacandes’s literary performative into two categories: “involuntary performative” “you”s, which are typically found in print narrative; and texts, exemplified by interactive narratives, that embed “forced participation” by making it impossible for the reader to continue in the text without physically performing the actions suggested by the text. Using empirical research on “you” in a digital fiction, Bell (2022) expands and nuances Walker’s typology to account for the different ways in which readers’ identities intersect with the “you”s in the text. She adds “authentic participation” “you”s, in which readers are asked to identify with the “you” but willingly participate as themselves as opposed to being forced to participate or playing a role. She also adds “voluntary performative” “you”s, in which readers are invited to willingly adopt the role of “you” as an experiment and/or simply for fun and entertainment. This latter category accounts for responses in which readers deliberately choose answers to second-person questions in order to see what happens and can be contrasted with Walker’s “forced participation” category in which readers unwillingly adopt the “you” position, simply so they can continue through the text. Bell’s two categories thus depart from Walker’s in that they allow for the reader’s agency in their responses to “you” as opposed to “you”s always “forcing” the reader to participate in or “involuntarily” enacting “you”s. While Walker’s (2000) and Bell’s (2022) categories are shown as discrete categories in Figure 2.1, as Bell’s research demonstrates and we explore below, different “you”s encode the different conceptualisations of interaction to varying degrees. It is thus more useful to think in terms of a continuum rather than a binary division when considering instances of participation and performance. This relationship is signified on the diagram by the bidirectional arrow between those categories.

Sorlin’s (2022) rhetorical stylistic approach also theorises the reader’s position relative to different forms of “you”, proposing alignments between “potential readerly reactions” and “authorial strategies” (216) in non-fictional narratives, print novels, and digital fiction. Her transmedial model thus proposes a theoretic relationship between responses to a text and the



stylistic features that might be responsible for them. Importantly, in developing her model Sorlin predominantly focuses on “you” narratives that utilise “fictional reference” (Herman 2002) forms of “you”. As Richardson (2006) shows in his explication of what he calls the “standard” form of “you”, this occurs when “a story is told, usually in the present tense, about a single protagonist who is referred to in the second person” (20). This kind of “you” is qualitatively different to that explored by Walker and Bell in digital fiction, and which we explore in the study below, where the reader is consistently directly addressed as the reader of the narrative and invited, if not challenged, to take on a role within the storyworld. That said, as shown in the preceding discussion and in Figure 2.1, fictional reference can have a doubly deictic quality insofar as it can invoke the reader and, as Sorlin shows, some of her “you” types can be found in digital fiction. All of her categories, as outlined below, are therefore relevant for this study to some degree.

Following Warhol’s (1986, 1989) distinction between engaging and distancing narrators, Sorlin proposes three authorial strategies: distancing strategies which discourage the reader from identifying with “you”; engaging strategies which encourage the readers to identify with “you”; and overengaging strategies that “that ask for total identification with an avatar of the reader-player” (217). These strategies are plotted against five types of readers potential responses to those strategies:

- 1 A “distanced reader” who “can recognise that some readers might be able to self-ascribe, but not her” (218). This predominantly occurs in response to “fictional reference” as a constituent of double-deixis opposed to “actualised address” and is therefore placed accordingly in Figure 2.1.
- 2 A “distantly engaged reader” where there is alignment but this “take(s) place against their will” (219). This corresponds with Walker’s “forced participation” category to the extent that readers reluctantly but necessarily assume the “you” role in response to an actualised address.
- 3 An “engaged reader” who “respond[s] favourably to the engaging style of a narrator using the ‘you’ address” (215) and thus “not only hears the call to the authorial audience but accepts it, thus reducing the gap between the ‘you’ slot - that anyone could fit in as a reader - and herself” (215). This corresponds to Bell’s (2022) “authentic participation” category of response to actualised address.
- 4 A “distantly overengaged reader” in which “the actual reader may be deeply immersed in ... [a] ‘you narrative’ ..., [but] she does so while staying aware that ‘you’ remains an ‘other’” (219). This also occurs in response to “fictional reference” as a constituent of double-deixis but differs from the distanced reader in terms of degree of immersion.

- 5 An “overengaged reader” who has “a sense of bodily immersion” but “since ‘you’ cannot refer to the reader, this overengagement cannot be sustained throughout the narrative” (219). This also occurs in response to “fictional reference” as a constituent of double-deixis but differs from the distanced reader and distantly engaged reader in terms of degree of immersion.

As shown above, two of Sorlin’s categories (i.e., distantly engaged reader, engaged reader) can be aligned with existing types of “you” that explain reader responses to “actualised address”. One proposes a new response to “fictional reference” (i.e., distanced reader). The last two (i.e., distantly overengaged reader, overengaged reader) are concerned with the extent to which a reader is immersed in a narrative and the way that this experiential state affects their ability to engage with textual “you”s. Thus, while Sorlin’s focus is somewhat different to ours insofar as she is interested in the relationship between engagement and/or immersion and identification with “you” in texts deploying predominantly “fictional reference” as opposed to “actualised address”, there are also some commonalities between our approaches. Like us, Sorlin analyses both the way that “you”s are used in the text – what we define as “textual features” – and reader responses to those “you”s – what we call “reader constructions”. Importantly, however, Sorlin’s categories are hypothetical as opposed to empirically tested. Unlike us, therefore, she does not derive her categories from reader-response data.

The preceding overview captures the complexity of “you” in its ability to refer to or potentially address characters and readers or both. As the discussion shows, there is general theoretical agreement that, when used in fiction, “you” likely prompts readers to feel directly addressed by the pronoun to various degrees (e.g., Fludernik 1994; Herman 2002) and that “you” encourages stronger reader identification with the textual construct designated by the “you” than the use of “he” or “she” in third-person narratives mode (e.g., Sanford & Emmott 2012). Some existing empirical research has shown that readers are likely to adopt a first-person, internal perspective when reading texts that use “you” in both single-sentence texts and texts that use extended second-person narration (e.g., Brunyé et al. 2009, 2011). However, other research shows that perspective sometimes has no effect on reader identification with the textual constructs (Macrae 2016). Importantly, while previous findings offer important empirical conclusions about how readers process “you”, with the exception of our preliminary work (Bell et al. 2019; Bell 2022), the ambiguous nature of second-person narration has not yet been thoroughly empirically investigated to show how readers cognitively process the second person in extended pieces of digital fiction.

### Our Empirical Study on “You”

Building on the empirical studies outlined above, which demonstrate that readers do experience an embodied response to second-person narration, our research aimed to explore whether responses to textual “you” in digital fiction can be categorised according to existing narratological categories and what the responses reveal about second-person narrative that is not captured in these typologies. Our research questions were: to what extent do readers feel addressed by the “you”s in the fiction? If readers do feel addressed, to what extent do they identify the “you” as themselves as a reader, as a character that is not them, or as a combination of both? To what extent do reader responses to “you” in digital fiction support or contradict current theories of narrative “you”?

To answer our questions, we investigated responses to *The [somewhat disturbing but highly improbable] Princess Murderer* by geniwate and Deena Larsen (2003) (henceforth *TPM*), a hypertext fiction produced in Adobe Flash software and published on the web. *TPM* is comprised of lexias – individual screens of text shown one at a time – which are connected by hyperlinks. It thus follows a hypertextual structure, allowing readers multiple pathways through a multimodally designed text. Readers navigate by clicking hyperlinked buttons on the top right of the interface and the text has no definitive ending.

*TPM* is a remediation of the Perrauldian “Bluebeard” fairy tale (*La Barbe bleue*, originally published in 1697) from a feminist angle. Thematically and stylistically, *TPM* mixes elements of the romantic fairytale, the crime mystery, and pornography, and it strongly alludes to and critiques the attitudes of hard-core gamers who blindly shoot and kill in-game characters and willingly accept the victimisation and marginalisation of female characters in mainstream videogame titles (see Ensslin & Bell 2012). Bluebeard is represented in *TPM* as a stereotypical Manichean villain, thus reiterating the binaries (e.g., good vs. evil) underlying many videogames. The original tale assumes a moral position in shifting the blame for the murders onto the princesses themselves, who all disobey Bluebeard’s order not to enter the “forbidden room”. In addition to the use of narrative “you”, every mouse-click triggers the sound of a woman’s sigh, a continually recurring auditory signal which suggests that readers are responsible for their deaths. A “Princess Census” also measures how many princesses are in the castle at any given time by responding to the reader’s mouse-clicks.

To investigate the extent to which readers feel addressed by “you” in *TPM*, we designed a study around Herman’s typology and specifically the categories that contain some form of address: fictionalised address, actualised address, and double-deixis. The second person’s inherent referential ambiguity as a special case of person deixis (Herman 2002: 332) should, in

theory, cause readers to reposition the referent of at least some “you”s flexibly between the virtual and actual world, between intra- and extradiegesis, and between protagonist, characters, narrator, narratee, implied, and actual reader. Focusing on the concept of a characterised “you”, Margolin (1990) considers the role of the reader in second-person narratives which presuppose the existence of a particular type of narratee. He suggests that, while the reader will not fully assume the role of “you”, they will recognise that there is an intended audience and deictically relocate, if only partially, into that slot. Margolin further notes that “the adoption by any actual reader of this communicative ‘you’ role will be easiest if ... his or her specified properties do apply to the actual individual” (439–40). Margolin thus suggests that readers will be more able to perform the role of “you” if they are able to relate to the narratee. In line with this theory, we predicted that readers would feel addressed by the “you”s in the text that they feel represent them and resist the reference of those that do not. However, given the deictic complexity of the pronoun and the medium-specific narrative complexity of *TPM*, we expected that the responses would be more complex and diverse than the theory suggests.

### *The Protocol*

The study was conducted from January to March 2016 and involved 16 readers (20–67 years old) who were all English students at Sheffield Hallam University, UK. All had some level of familiarity with digital fiction and/or had read some digital fiction before. In terms of purposive sampling, this cohort of participants were chosen because the mixture of narrative styles and voices, including the consistent use of the second person, makes *TPM* potentially challenging for readers. We therefore sought to minimise the other potentially alienating effect of hypertextuality, by which novice readers might have been unfavourably distracted (see Gardener 2003, Pope 2006, 2010), by using readers who were familiar with this narrative form.

In terms of the stimulus, we showed the text to readers screen by screen. One of the fortuitous benefits of using hypertext fiction in a reader response study is that the texts naturally exist in fragmented form. Hence, the researcher does not have to artificially fragment the text into smaller chunks for the study, thus preserving a relatively authentic reading environment while also allowing small chunks of text to be isolated for analysis (cf. Miall & Dobson 2001). The fragmented form of *TPM* does however offer some logistical challenges because it is also multilinear. Isolating a consistent “textual feature”, that is, “an enduring property of the text [that] does not vary with the reader or the reading situation” (Bortolussi & Dixon 2003: 39), can be more difficult.

In his empirical study of multilinear hypertext fiction reading, Gardner (2003) found that very few screens were shared across hypertext reading sessions by different readers. Given that *TPM* is also a multilinear text that can be read in different orders, we could not rely on an authentic free reading section to produce a comparable data set. We therefore used a structured stimulus set to gather the data. Screenshots of *TPM* were put into a hyperlinked PowerPoint presentation and shown to readers in a slideshow as though they were being shown in the original web version of the text; for example, areas of the screen were hyperlinked as in the original, and mouse-clicks progressed the narrative. Crucially, while the sequence of lexia presented in the structured reading was constructed for the study, it was adapted from a reading that could have plausibly taken place, so it did represent a typical sample of lexias that readers might experience in their own reading in a feasible order.

The textual stimulus comprised 31 screens in total (including the title page) and readers were told to read the text at their own pace, but that the researcher would stop them on particular screens to ask them about particular “you”s. During the study, readers were asked about nineteen “you”s across seven lexias (so approximately 23% of the stimulus was tested), and these examples were chosen to test a comprehensive range of different types of “you” as defined by Herman’s typology. The study design thus aimed at some ecological validity in terms of preserving a semblance of the fragmented reading experience of digital fiction, but we also recognise that the situation was artificial in terms of the researcher’s involvement.

When participants reached one of the 19 “you”s that were tested, they were asked to indicate their answer to the question “To whom does ‘you’ refer in this screen?” on a pen-and-paper-based multi-point response scale designed to measure their response to “you” (example given in Figure 2.2).<sup>2</sup>

In advance of their reading, participants were given definitions of each point on the scale. The researcher stated that:

A means “you” is a fictional character so the “you” refers only to a character; E means “you” is me the reader, so is referring to you as the reader of the fiction; C means that “you” refers both to you as the

Lexia 1, 'you' 1: To whom does 'you' refer in this screen?					
You = 'a fictional character'				You = 'me the reader'	
A	B	C	D	E	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Figure 2.2 Likert scale used in the “you” study

reader and to a fictional character at the same time; it's half you as reader and half a fictional character. "B" means it's also a mix, but it is more a fictional character than you as reader. "D" is also a mix but is more you the reader than a fictional character.

In terms of Herman's typology, A represents fictionalised address, E represents actualised address, and B, C, and D represent various compositions of double-deixis. Participants were also told that they could put their selection somewhere else on the scale if they wanted to, but very few participants did so and, if they did, we show these in the results.

While we were working within a largely experimental paradigm in so far as we tested a pre-defined feature via a Likert scale in a laboratory-like setting, we also recognise that the Likert tool, typically used in quantitative research, cannot capture the complexity associated with the processing of narrative "you" alone. Therefore, once participants placed a mark on the scale, they were then asked to explain their choices according to a structured interview. If they chose "A", they were asked: "Why do you think it is a fictional character?" followed by "Who is the fictional character?" followed by "How does that make you feel?". If the answer was "B", "C", or "D" they were asked: "Why do you think it is both character and reader?" followed by "Who is the fictional character in this case?" followed by "How does that make you feel?" If the answer was "E", they were asked: "Why do you think it is you as a reader?" followed by "How does that make you feel?". Occasionally, follow-up prompts were used to stimulate further explanation. The Likert scale was therefore used as a tool for showing participants how we as researchers interpreted the different ways in which the "you"s could be received by readers and thus as roles that they could potentially identify with, as opposed to the scale being used as an overarching numerical measure as is typical in quantitative research.

The combination of conceptually quantitative (i.e., marking on the "you" Likert scale) and qualitative (i.e., follow-up questions) methods allowed us to interrogate the reader responses comprehensively and probe the deictic complexity of the "you" as reflected in Figure 2.1. As Messenger Davies and Mosdell (2006) suggest, "[qualitative] comments ... act as a further reliability check on the numerical information in the questionnaire answers ... and ... provide extra, more nuanced and personalised details to augment or explain this information more clearly" (33). Thus, the quantitative marking on the "you" scale allowed an understanding of where readers placed the "you" on the cline, but this was done primarily to elicit qualitative interview data about the nature of that conceptualisation of "you".

All interviews were audio recorded, transcribed, and subsequently coded using NVivo. We focussed on identifying evidence of the types of "you" outlined in Figure 2.1 with other emerging themes inductively coded from

the data. When analysing the data for reader constructions of “you”, we paid attention to both explicit language use about “you”, and implicit linguistic cues in reader responses that indicate a perceived relationship to the “you”s.

Overall, our approach generates empirical evidence of existing categories of “you” and new empirically verified insight into how readers cognitively process “you” by showing the ways in which readers accept and reject second-person address. Following the methodology outlined in Chapter 1, we examine textual features via the stylistic analyses of the text, and reader constructions by showing how participants’ mimetic, synthetic, thematic, and medial responses to *TPM* relate to and are stimulated by different types of “you”. The analysis of second-person pronouns in context is particularly important in this regard because, as Mildorf (2016) has shown, “the indexical pronoun *you* does not operate in a discursive vacuum, and since reading begins in and through verbal stimulation it seems to be particularly important that we pay due attention to the language used in narratives more generally” (21). While Mildorf examines “you” in print fiction and does not undertake empirical research, her argument extends to the research reported on in this chapter. Generic typologies of narrative “you” are essential for categorising different ways in which the second person can be used referentially in texts, but examining “you” in context is necessary for understanding responses to this ambiguous form of address. We show in this chapter that while existing typologies of narrative “you” can show its referential potential, a new cognitive model of reader self-positioning is needed to capture the complexity of readers’ experiences of “you” in digital fiction more comprehensively.

## Analysis

What emerged from the coding of the data was that participants felt that they were being addressed as reader, character, or somewhere in between but that their ability and willingness to accept the address was dependent on the context of the “you”.

### *Establishing Roles with “You” and “I”*

The first lexia in the stimulus corresponds with the first lexia after the title page in *TPM* (so lexia 2 in the entire sequence) and, in both the original and the adapted text, the reader’s first encounter with the narrative (see Figure 2.3).

The lexia displays a blue background with a signpost rendered graphically. Three buttons at the top of the screen represent hyperlinks and associated entrances to the text. At the bottom right of the screen the text

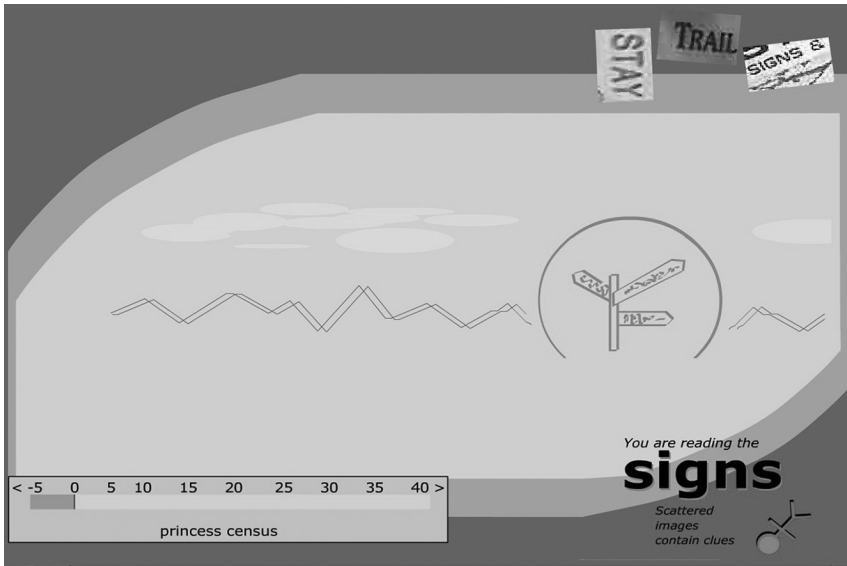


Figure 2.3 Screenshot of lexia 2 from structured reading of *TPM*

reads: “You are reading the signs/Scattered images contain clues”. Stylistically, “you” is the subject here with the present progressive verb “are reading” representing a process that is both present and ongoing. The main verb “reading” represents what the reader is doing. Thus, we can infer that the intended referent of “you” is the reader. In terms of existing typologies, the “you” represents an “actualised address” which reaches out from the fictional world to address the reader and, as a specific form of actualised address, Kacandes’ “literary performative”, because the reader involuntarily actualises what the text suggests – i.e., reading – simply by reading the sentence. Readers thus should, according to that definition, be able to identify with the “you” fairly unproblematically.

Table 2.1 shows reader responses from our study to the “you” in lexia 2.

While most participants chose options that suggest they identified with the you-as-reader as opposed to you-as-character, not all opted for the absolute “reader” end of the scale. Of the ten readers that chose “E”, five

Table 2.1 Collated responses to the “you”s in lexia 2

	A (fictional character)	B	C	D	E (reader)	Other
You are reading the signs	-	1	1	4	10	-



justified this on the basis that no characters had been introduced yet and thus it had to be them by default (e.g., “none of the characters are introduced yet and I’m the only other person here” [Gargi, 49–50]<sup>3</sup>); four that they felt like they were receiving instructions to be “you” (e.g., “It’s telling me to read the signs” [Lauren, 32]) and thus, implicitly, they obeyed; and two that the text described the reading activity they were engaged in (e.g., “it’s talking about what I’m doing” [Hannah, 72–3]). In the context of the latter two themes, there is sustained evidence of the text being personified with the pronoun “it” used alongside verbal processes such as “telling” and “talking”. The first-person pronoun “I” is used to refer to the reader in the actual world only.

Of the four readers who selected “D”, two mentioned that it felt like they were receiving instructions and two that the text corresponds to the reading that the reader is doing so there is correlation between some of the justifications for “D” and “E”. Two readers also mention that no character has been introduced but that they are anticipating there being one and this precludes them from selecting “E” (e.g., “I think it’s more reader ... I see a fictional character as like maybe perhaps later on in the story” [Chloe, 48]).

There is empirical evidence of readers responding to Herman’s actualised address and more specifically Kacandes’ “literary performative” in the responses above. However, none of the readers selecting “E” or “D” reported feeling forced into a role but rather that their association with the “you” was simply inevitable because of the use of the verb “reading”. Thus, their verbal explanations show evidence of Bell’s (2022) “authentic participation” “you” and Sorlin’s (2022) corresponding “engaged reader” category because they are authentically adopting that role as opposed to being forced into it.

The reader that selected “C” expresses a stronger desire to be a shared referent of “you”, stating that she is “exercising my right to stay slightly outside of what’s going on here if I want to ... I am reading the signs, you know, that is true of me ... but I don’t take this to only refer to me” (Georgia, 76). In this conceptualisation, Georgia recognises that the “you” refers to the process in which she is engaged – i.e., “reading” – but she is keen to remain at least partially “outside” of the “you”’s frame of reference. We see evidence of her responding to Herman’s double-deixis but, in contrast to the D and E responses, the actualised address part of the doubly deictic “you” can be understood in terms of Walker’s “forced participation” (Walker 2002) and “distant engagement” (Sorlin 2022), in that Georgia notices the alignment between the text and her own role in “reading the signs” but simultaneously resists what she sees as something that is trying to draw her in against her will. Notably, in terms of pronoun use, Georgia uses “I” to refer to her experience of this part of *TPM*. However, because she maintains that she does not “take this [the “you”] to only refer to me”,

the first-person pronoun is used to refer to herself in the actual world and to a fictional “you” in the storyworld at the same time. We thus see evidence of doubly deictic “I” (Bell et al. 2018) in which readers use “I” to refer to entities within the storyworld and entities in the actual world at the same time.

The reader that selected “B” is less concerned by being drawn into the text and instead simply does not feel addressed: “I’m aware I’m sat here participating in it, but ... there’s not been any immersion for myself so ... I feel like it’s more – just whoever it’s aimed at, just a fictional world” (William, 42). Because William does not feel addressed, he assumes that the “you” is aimed at a fictional character by default.

The third lexia in the structured reading (and one of the two possible paths in *TPM* proper) offers readers some insight into the nature of the storyworld and the reader’s potential role within it. The text reads:

There was a bad bad man. His name was Bluebeard and he had a penchant for princesses. When he used them up, he murdered them. Thus Bluebeard consumed the choir of little princesses that inhabited the planet.

Perhaps you are Bluebeard, or perhaps you are a princess. Perhaps you are a detective, come to solve the case.

The first paragraph uses omniscient third-person narration typical of fairy tales to introduce the storyworld’s protagonist Bluebeard. The repetition of the common adjective “bad”, which premodifies “man”, gives the narrative a more colloquial, conceptually oral quality. This informal, familiar style contrasts with the content of the paragraph which introduces the distinctly horror-inducing topic of homicide. In the second paragraph, the epistemic adverb “perhaps” is repeated and the narration changes into second-person address, where the reader is potentially drawn into the storyworld by being confronted with the hedged choice of adopting different character perspectives as though in a videogame context (“Perhaps you are...”). However, whereas in a videogame that choice would have to be actualised with the player adopting a role in order to play, *TPM* leaves it open, thus enabling a more speculative and reflexive mode of engagement with the text.

As shown in Table 2.2, the responses generally shift to the left of the scale as the different possibilities of the “you” are specified, suggesting that readers in our dataset are slightly more willing to align themselves with a princess than with Bluebeard or a detective. Chloe explicitly explains her shift from “B” and “B” to “C” in terms of how she can relate to those roles. With “perhaps you are Bluebeard”, she states that it “would make you just think of it as a fictional character in a book” (88–89), with

Table 2.2 Collated responses to the “you”s in lexia 3

	<i>A (fictional character)</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E (reader)</i>	<i>Other</i>
Perhaps <b>you</b> are Bluebeard	1	4	1	7	3	
perhaps <b>you</b> are a princess	1	5	2	5	3	
perhaps <b>you</b> are a detective	1	3	3	5	3	1 (B/C)

“princess”, “it’s kind of made me feel like the victim now” (146–7), and with “detective”, that it “is a fictional character but then it’s also the reader because ... it kinda puts you into that narrator’s point of view where um being a detective, you would know more than the other characters” (204–5). Using Herman’s (2002) “generalizable you” (340) to refer to herself and other readers of the text, she takes a thematic response position in relation to all three roles, describing them in terms of what Phelan (2005) defines as “the ideational function of the characters and in the cultural, ideological, philosophical, or ethical issues being addressed in the narrative” (7). In Chloe’s synthetic response, involving an “interest in and attention to the characters and to the larger narrative as artificial constructs” (Phelan 2005: 20), she makes a metaphorical link between the detective character type and the process of reading, suggesting that they both involve collecting and deciphering information. Her response therefore also takes a metafictional perspective in trying to make sense of her role in the synthetic dimension of the narrative.

Of the participants that selected B, C, and D, most acknowledge the blended nature of the address. For example, James selects “D” and notes that “I’m aware of being me, but I’m also aware of being possibly Bluebeard, the princess or the detective” (James, 72–3). Connor, also selecting “D”, suggests “it doesn’t feel completely like me as a character, that’s why ... it still feels like me as a reader” (Connor, 74–5). James uses the conditional adverb “possibly” to hedge his association with the characters and Connor’s use of the temporal adverb “still” shows consistency with his response to lexia 2 above. However, in these cases, as in many of the other responses, both readers show ambivalence about being either partially or fully aligned with the “you”. In other cases, readers felt they were more strongly coerced into that position. Lauren, who selected “B”, comments that “it’s like they’re ... pushing me into the fictional character’s shoes” (53–4) and Chloe, also “B”, that “that has put me in that position, so I’m reading it as if ... I’m the character” (86–7). In this case, we see evidence of “forced participation” insofar as they have not willingly adopted this role.

As the preceding discussion shows, where readers have selected B, C, and D, we can see readers' meta-awareness of what Ensslin (2009, drawing on Dovey and Kennedy 2006) defines as "double-situatedness" in which readers are "embodied" as direct receivers, whose bodies interact with the hardware and software of a computer [and] ... 're-embodied' through feedback which they experience in represented form, e.g. through visible or invisible avatars" (158). Their quantitative marks on the Likert scale and their explanations of their ontological positions thus reflect the doubly embodied nature of the narrative experience, confirming that this theoretical category can be empirically observed.

One participant (Abigail) picked "A" for each of the three "you"s, meaning that she felt they were referring to a fictional character only. Her justification is that "I'm not the fictional character because I'm reading about it ... as a third pers – I'm reading as a reader" (139–40). She thus uses logical reasoning to deduce that she cannot be a character because she is reading the text and thus is outside the narrative.

Three participants felt that the three "you"s referred to them as a reader each time. When asked about the first "you" in this lexia, Gargi justifies this on the basis that "I am navigating the screens, I think it's talking to me" (Gargi 63–4) and thus, as seen in the responses to the "you" in lexia 2 above, uses a medial response to align herself with the literary performative "you". Emily puts you-as-reader by default because "I don't know who else it could be" (Emily, 110). Georgia's response – "I'm expecting to be given lots of options in this kind of text" (99) – shows evidence of a mixed response in that she reflects on the structure of the text (synthetic), the type of text (medial), and her role within it as "you". When asked about the second and third "you"s, each reader simply says that they feel the same so that their position relative to them as the text progresses does not change.

In the responses to the two lexias above, we see largely mimetic responses in which readers assess the extent to which they can align themselves with what the text describes – in these cases, a world in which the reader is reading and a world in which they are a particular character. Significantly, Phelan's and Peplow et al.'s account of mimetic reading focusses on the reader's evaluation of the feasibility of a storyworld populated by fictional characters including "the believability of the text, with characters judged according to real world standards" (Peplow et al. 2015: 67). However, since the "you" here reaches out to address the reader in the actual world, the mimetic also applies to the reader themselves. That is, in order to be able to identify with the "you", they have to see themselves as "you" and thus their mimetic response includes an evaluation of their own role in the narrative. This particular type of mimetic response is therefore produced because of the ontologically flexible nature of the second-person pronoun.

To account for this specific type of mimetic response, which is enabled when the reader is implicated as a character in the text by “you”, we expand the definition of “mimetic response” to include the feasibility of the reader as character in the storyworld. In this and other cases of reader self-reference in relation to or as part of the storyworld, we propose a new subcategory of mimetic response defined as an “automimetic response” in which readers evaluate the extent to which the “you” represents them in the text.

### *Double-Deixis and the Reader*

The previous examples show reader responses to “you”s at the beginning of the text and thus where the characteristics of “you” are being developed. In this section we examine the twelfth lexia in our manipulated text stimulus in which the two different occurrences of “you” were tested. At this point in the structured reading, readers will know that Bluebeard kills princesses, that a detective is trying to solve the case, and as shown via lexia 2, that “you” could be one of three different characters. Readers have also been told that “with each click, a princess dies” (lexia 4) and that “the conjunction between ‘you’ and Bluebeard grows stronger” (lexia 6). Thus, the text consistently tries to position readers as “you-as-Bluebeard” or at least as responsible for the princesses’ murders. When the reader gets to lexia 12 in the structured reading, they will have been clicking the mouse and hearing the soundtrack of a princess’ sigh for some time, and they will have been reading the text uninterrupted for five lexias. The text reads:

A princess’ scream reaches beyond the labyrinth of signs:

‘I beg you, no more clicks, U-gggghhh! I’m dying, you sadomasochistic torturer! My bowels are unravelling outside my body, the coup de grace ambles towards me, just ... one ... final ... chunk of text; text in the sky, under the bed, text to consume other texts, texts consume...’

The text is largely comprised of direct speech which the extradiegetic narrator reports as a “scream” uttered by one of the princesses. The princess begs for “no more clicks”, which self-reflexively references the way in which the reader clicks the mouse, resulting in the death of a princess each time. That the screams reach beyond a “labyrinth of signs”, which alludes to the hypertextual structure of *TPM*, also implies that they can be heard outside the text. The syntactic construction, “I beg you”, which puts the “you” in the object position, explicitly sets up a dialogue between the princess and an unnamed addressee. However, the fact that the reader is

Table 2.3 Collated responses to the “you”s in lexia 12

	A ( <i>fictional character</i> )	B	C	D	E ( <i>reader</i> )	Other
I beg you	5	1	2	3	5	-
I'm dying, you sodomasochistic torturer!	5	4	2	2	2	1 (D/E)

responsible for the clicks means that they might more easily identify with the “you” here. The use of the “you” as subject in “you sodomasochistic torturer” should be more difficult for readers to identify with, because it involves them accepting the (sodomasochistic torturer) identity that the princess allots them, which we would assume is uncomfortable for them to adopt.

Readers negotiate their identification with the second person pronoun in lexia 12 using the full range of the scale. Their Likert scale responses, which are presented in Table 2.3, vary considerably. As Table 2.3 shows, the spread of the responses over the two extremes of the scale seems not to indicate a strong trend and can instead be seen to illustrate the inherent ambiguity of the second-person address in *TPM* specifically, if not, as indicated in theoretical analyses of the second-person pronoun more generally.

Most participants that chose “E” on the scale for this first “you” in the lexia explain they did so because they were the ones performing the action of clicking (4 out of 5). Their medial responses suggest that they are inevitably “you” because they are performing a role that the text describes. “You” thus functions as a medium-specific form of “involuntary performative” (Walker 2000) in which clicking the mouse is the verb that at least partially defines the reader’s identity. Those that chose “A” refer mainly (3 out of 5) to the direct speech of the princess by way of argumentation, but also list non-identification with the “you” and their own involvement in the plot as a fictional character as reasons for opting for “you” as a fictional character. They thus describe their relationship with “you” in synthetic terms. Lauren, for example, who opted for A, explains her choice on the basis that “Like that’s speech from a fictional character, so - and they’re obviously not speaking to me” (Lauren, 121). The intonation of Lauren’s use of “like” in the audio recording suggests she uses it as a discourse marker, rather than a comparator. Like most others who marked “A”, she justifies her choice in terms of an automimetic response on the basis that the “you” refers to the direct speech of the princess, and consequently the ontological impossibility of a character speaking to a reader means she is

not being referred to by the pronoun. Somewhat paradoxically, however, she also implicitly recognises that she is at least partially addressed:

*Researcher:* Okay, so to whom are they speaking?

*Lauren:* The character that I'm supposed to pretend to be.

(Lauren, 122–123)

In the above exchange, Lauren's conceptualisation of the "you" as "the character that I'm supposed to pretend to be" suggests that the "you" here is not purely a fictional character (as in their "A" mark on the Likert scale). Lauren's use of the modal phrase "I'm supposed to pretend to be" suggests an unrealised state of affairs in which obligation ("supposed to") plays a role. With the verb "pretend to", she further distances herself from the possibility that she could be a person killing princesses, emphasising the fantastical element of the narrative instead. Here we see linguistic evidence of a reader's responding to a "you" that combines somewhere between what Walker defines as a "forced participation" in which Lauren feels obliged to assume a role, and Sorlin's (2022) category of "distanced reader" in which a reader "can recognise that some readers might be able to self-ascribe, but not her" (218). While Lauren recognises that she does not accept the actions associated with the "you" and therefore argues that the "you" does not refer to her, she simultaneously acknowledges that she feels as though she is meant to take on a fictitious role of this character "you". Thus, while Lauren selects "A" on the Likert scale, her verbal justification suggests that she thinks of the "you" as having more than one addressee and thus as doubly deictic, referring both to someone in the actual world (Lauren) and in the fictional world (somebody killing princesses) at the same time. However, her discursive rejection of this identification with the character also problematises the idea that she is that character.

The participants' Likert responses to the second "you" of lexia 12 are diversified, although the majority of participants tended to opt for "you" as fictional character or "you" as a mix, but more a fictional character than a reader (see Table 2.3). Whereas a number of participants seem to feel that because they have accepted that they are performing the action of clicking, they are also the ones being referred to as "somasochistic torturer" (e.g., Gargi, 172), others argue that "you somasochistic torturer" addresses "you" as a reader and "you" as a fictional character as separate entities (e.g., Thomas, 235–252). Yet others find that the "you" has become an "amalgamation of [themselves] and Bluebeard" where they have been "cheated into being Bluebeard" or now are "the character Bluebeard now, [killing] on purpose" (James, lines 275–276).

The way in which participants negotiate the possibility that they could be Bluebeard, and the responsibility this gives them over killing princesses, is illustrated below by Lewis:

*Researcher:* Why do you think that it's both a fictional character and you as the reader?

*Lewis:* Yeah...it's me who's ... consuming the text and that seems to be what's torturing her. ... Is that the more the story goes on, the worse ...it gets for her. ... But at the same time ... I can't sort of take the full ... sort of responsibility for it when I know that there's another character within there ... who I can see is torturing her and like the image on the left as well there's another - there's two characters there.

(Lewis, 228–238)

Here, Lewis' automimetic response shows that he cannot take "full responsibility" for "torturing" the princess, and relies on epistemic modality ("I know") to highlight that another character is involved who is committing the act of torturing the princess ("there's two characters there"). James, on the other hand, lessens his responsibility for Bluebeard's actions by discursively diminishing his own agency and negatively evaluating the act of clicking and having become Bluebeard, thereby distancing himself from this character.

*James:* The game and the world of clicking have become the same ... world [now], which is not what I wanted to happen. ... So, yeah, it makes me feel really guilty, being called a sadomasochistic torturer, so ... is that you as a reader, you as a character ... bit of both, I suppose, I'm now C ... You is me, but I am now implicitly being - it's being suggested that I am a bit like Bluebeard I've become Bluebeard, uh so you is both, ... it's ... an amalgamation of me and Bluebeard, I think. ... I didn't want to be Bluebeard, so [I'm] not (laughter starts) very happy (laughter ends) ... I've been cheated into being Bluebeard... Uh, yeah I feel drawn into a web that I didn't want to be drawn into... Things are not as... simple any more, there's not just that and this, now it's both together, [w]hich is slightly disconcerting. [It] shows how easily the mind can be drawn into a fiction, [how] easily [one] can be made to think in certain ways [a]bout oneself.

(James, 260–298)



Firstly, by highlighting his negative stance towards having become Bluebeard in “this is not what I wanted to happen”, James evokes a desired but unrealised alternative of not being Bluebeard. Similar discursive framing is used when he states that he has been deceived. James also expresses negative emotions as a result of the undesirable identity position he feels he is placed in (“feeling guilty”). Although this admission of guilt implies James has accepted the identity position of Bluebeard and takes responsibility for Bluebeard’s actions, it simultaneously highlights the participant’s evaluation of these actions as wrongful. In theoretical terms, he is a “distantly engaged reader” (Sorlin) who sees a “you” that is attempting to “force” him to participate (Walker) and he does not like it. James states explicitly how little agency he feels he has (“I feel drawn into a web that I didn’t want to be drawn into”) but this lack of agency is also implicit in his negative evaluation of the situation of him being Bluebeard. In the final lines of the extract, James states that “you” as both reader and character “is slightly disconcerting, [as it] shows how easily the mind can be drawn into a fiction”. In this utterance, he simultaneously seems to accept that he is Bluebeard and to distance himself from it by generalising, referring to “the mind”, instead of using a possessive personal pronoun, and by highlighting the seeming lack of control he has over this. What is particularly striking about James’ auto-mimetic response is that it seems to show a conceptualisation of the ontological boundaries between the fictional and actual worlds as very fluid. For him, the “game” (i.e., *The Princess Murderer*), in which Bluebeard is killing princesses, and the actual world in which he is clicking the mouse, have converged, and he therefore has “become Bluebeard”. James opts for “C”, where “you” refers both to you as the reader and to a fictional character at the same time, and emphasises the fictionality of *TPM* in order to highlight how easily he gets drawn into the fiction, as though it were real life, and how he therefore *necessarily* has to adopt the identity of Bluebeard. This contrasts directly with Lauren, who emphasises the fictional aspect of *TPM* to reject an affiliation with the Bluebeard character. Both participants show resistance to character identification here, but while Lauren rejects the identity of “you” as sadomasochistic torturer from the beginning, James accepts it while simultaneously stressing his negative stance towards it.

The last example we examine is the fifteenth lexia in the sequence which contains four instances of “you” or “your”. In the lexias leading up to it, readers will have read that a princess is being tied up and killed by the “you” and that the princess census shows the number of princesses is diminishing. Lexia 15 reads:

Ghostly outlines of any remaining princesses flutter in vain. Don’t you believe in their pain? That is the only interpretation that saves you from being a psychopath. You look at your hands, dripping in blood. §

The opening declarative “ghostly outlines of any remaining princesses flutter in vain” suggests all princesses will soon be dead. The passage “Don’t you believe in their pain? That is the only interpretation that saves you from being a psychopath” seems to address the reader, who has previously been framed as at least partly complicit through their mouse-clicks and, as the reader response analysis above suggests, has accepted or resisted this identity so far. The abstract noun “interpretation” reinforces this reading as it refers to the extradiegetic and metafictional act of analysing the meaning of the narrative. The final sentence, “You look at your hands, dripping in blood”, however, creates an ontological switch between what the reader has been made to believe to be their own identity and the more likely reading that the address is here directed at a fictional character. While the first half of this sentence (“you look at your hands”) could apply to the reader, the second half (“dripping in blood”) presumably does not. The referent of “you” and “your” thus might change anaphorically as soon as readers reach the present participle “dripping”. In theory, unlike the preceding examples where readers are referred to as “reading” or “clicking”, it should be harder for the readers to identify with the final two instances of the second person because the proposed identities presumably do not resonate with their real identities in the actual world.

Since the addressee of “you” changes throughout the lexia, we might also expect to see those changes to be uniformly reflected in the reader-response data. Table 2.4 displays the collated responses to the four “you”s in lexia 15. In line with our stylistic analysis, most participants felt that the first two “you”s referred to them as readers but it is worth noting that participants use the C, D, and E options on the Likert scale rather than opting for E (“you” refers to the reader) exclusively. Justification provided for feeling addressed by the first two “you”s included participants feeling like they were responsible for navigating the text (e.g., “You are essentially in charge

*Table 2.4* Collated responses to the “you”s in lexia 15

	<i>A (fictional character)</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E (reader)</i>	<i>Other</i>
Don’t <b>you</b> believe in their pain?	2	0	3	5	5	1 (D/E)
That is the only interpretation that saves <b>you</b> from being a psychopath	4	1	4	3	3	1 (D/E)
<b>You</b> look...	5	3	6	0	1	1 (D/E)
...at <b>your</b> hands	4	3	6	1	1	1 (D/E)

of what's going on" [Emily, 364] and "because it's explicitly saying clicks ... it's, you know, my actions as the reader that's making this happen [Benjamin, 192–4]; also see Emily, 361–362; Gargi, 218–243; Hannah, 312–341 for similar responses); that the "you"s were pulling the reader into the text (e.g. "it's getting you involved, making you part of the text" (Thomas, 269–270); and that the reader is put in dialogue with or challenged by the text (e.g., "it's you being asked directly this question, that don't you feel their pain" [Chloe 360]); also see Thomas 262–270 and Georgia, 311–312 for similar responses). Throughout these responses, we see readers providing synthetic and medial responses in which they highlight the dialogic if not coercive nature of the interactive text. While they do not necessarily object to the positions they are put in, their responses show sustained evidence of forced as opposed to voluntary participation. Moreover, many of the participants use the second-person pronoun in their responses to refer to both them as reader and them as character. Thus, while Herman's category was originally defined in relation to narrative-you and thus as a form of second-person reference used within a literary narrative – that is, a textual feature – the participant data show that readers also use this form of reference and thus doubly deictic "you" can also be found in reader constructions. More specifically, doubly deictic "you" is used by readers in ways that imply they are referring to "entities ... internal to the storyworld and ... to entities ... external to the storyworld" (Herman 2002: 338) at the same time.

In contrast with our stylistic analysis, for the first two "you"s in lexia 15, a number of participants opted for "A" where "you" refers only to a character (2 for the first "you" and 4 for the second "you"), "B" which is more character than reader but a mix nevertheless (0 for the first "you" and 1 for the second "you"), or "C", where "you" refers equally to both reader and character (3 for the first you" and 4 for the second "you"). When looking at participants' reasons for "you" referring to a character, they give fewer reasons, but indicate, for example, that the sentences could relate to either character or reader (Jessica, 204–239), that Bluebeard is responsible for the killings of the princesses (Abigail, 360–411), or that it is addressing the reader as a fictional character (Sam, 226–247).

When looking at the second "you" in lexia 15, it is clear that readers found it more difficult to align themselves with this "you". Seven out of nine participants that opted for either "A", "B", or "C" mentioned that they do not consider themselves to be a psychopath or simply do not feel addressed by this "you" (e.g., James, 369–384; Thomas, 285–308; Lauren, 188–211), that they do not associate themselves with the murdering of princesses (e.g., Abigail, 387–411; Jessica, 242–278), or that they feel uncomfortable with being associated with the label psychopath and the

actions of the character (e.g., William, 238–248; Georgia, 325–381). William’s response typifies participants’ discomfort with and resistance to projecting into the second “you”:

*William:* Midway for that one. ... ‘Cause it’s almost like she’s still addressing me the reader, but I don’t want her to be addressing me the reader, ‘cause uh she’s like psychoanalysing me, that I might be a psychopath.

*Researcher:* Okay, so who’s the fictional character?

*William:* The fictional character who she’s saying - I could be a psychopath, I hope she’s talking about Bluebeard.

(William, 238–245)

William states that he “hopes she is talking about Bluebeard”, rather than him, because he does not “want her to be addressing me the reader”. Although William’s interpretation of the first two lexias shows that he feels addressed as a reader, he also strongly resists this identity, not wanting “her to address him”, and opting for “C” (“you” refers equally to reader and character) in response to “That is the only interpretation that saves you from being a psychopath”. Here, as in the example from lexia 12, the response suggests that there is a “you” that the text wants the reader to be (a psychopath) and a “you” that the reader chooses to be (not a psychopath). The referential ambiguity of the second-person pronoun and potentially doubly deictic nature of it creates a resonance between a generic “reader” and the current participant, but also allows the distantly engaged reader/participant (Sorlin) to dispute what they see as the forced participation (Walker) intent of “you”.

The undesirable identity position of the “you” in “don’t you believe in their pain” is also negotiated discursively by other participants in different ways.

*Gargi:* It could be a character, but that I’m still controlling, sort of, but a character in the thing that I’m still controlling ... at this point, I feel like, you know, like this whole control thing that I have is sort of like an illusion, like you enter this thing thinking that you have control. ... But then as you click, you realise that ... no matter what you do, these people are dying and this is what’s happening and so you’ve tried clicking ... the same thing’s happening, so you’re making me do this on purpose... that there’s no way out of this.

(Gargi, 193–215)

As the preceding extract shows, rather than give the narrator power over deciding whether the reader is a psychopath, Gargi, for example, claims

that the “you” is a character, maybe Bluebeard, that she is “still controlling”, but that this idea of control is “like an illusion” and that “no matter what” she does, “people are dying”. Gargi’s medial response shows she is aware of the illusory agency (MacCallum-Stewart & Parsler 2007) that *TPM* grants her as an interactive digital narrative. This lack of control absolves Gargi from having to take responsibility for her actions as a reader and helps her to distance herself from reader identification with the “you”. This is again similar to the identity position taken by other participants. It shows how, in alignment with our stylistic analysis, readers struggled to align themselves with the second “you” in lexia 15, as this would mean accepting the identity position of being a psychopath that the text allots them. In contrast with our stylistic analysis, however, some readers resisted this identity position by opting for “you” as character or a mix of character and reader and discursively arguing that because they were not a psychopath, the text had to refer to a character instead of them.

A similar reasoning is used by participants for the two instances of the second-person in the final sentence of the paragraph, “you look at your hands, dripping in blood”. Here readers still tend to feel addressed by the statement if they felt addressed earlier, but their position on the cline tends to shift more towards the middle, as is visible in Table 2.4. The explanations for “you” 3 (i.e., “You look...”) vary. Six out of 16 participants produced a mimetic response in which they note that the “you” refers to a character at least partly because their own hands are not literally dripping in blood, and that therefore the “you” refers, either completely or partially, to a character rather than to the reader. Since Bluebeard has been described as the perpetrator elsewhere in the text, readers mostly believe the fictional character involved to be Bluebeard or Bluebeard’s apprentice (seven out of 16). Three out of 16 participants interpret themselves as having become Bluebeard, while four other participants interpreted the final two “you”s automimetically as referring to a version of themselves, or an implied reader that is not them. One participant felt that the character addressed was a computer programme or virus, while one other participant felt the “you” addressed only the reader, and that no characters were addressed in “you” 3.

Hannah selected a point between D and E on the Likert scale. Her response below characterises how readers tended to still feel addressed by the third and fourth “you”, despite the general shift on the cline away from “you” addressing the reader:

*Hannah:* It’s like I know if I actually look at my hands, they’re not gonna be covered in blood, but ... I still do feel kind of a little bit weirdly guilty, because it is like even though I’m not intending it, it’s like this kind of character idea of me is guilty

of all this and ... it does kinda feel like although it is talking to me, it's not ... like literally saying at the computer, look at your hands, like it's - ... it's sort of related to my actions within the story.

(Hannah, 348–354)

Hannah indicates here that she knows that if she looks at her hands “they’re not gonna be covered in blood”, but, despite this, she still feels guilty because of her “actions within the story”, and that it is “this kind of character idea of me” that is guilty of all of this. That Hannah feels guilty about something that she has been forced to do in the storyworld shows the referential power of the second person in its capacity to implicate the reader. It highlights the medial issue of quasi control readers refer to as well as their perceived lack of agency in negotiating the negative identity positions relating in the text. Moreover, it suggests that a sustained use of “you” address coupled with devices that implicate the reader in the text, such as the princess census and involuntary performative verbs such as “reading” and “clicking”, can influence the reader’s uptake of the second-person address irrespective of the qualities associated with it.

### **A New Cognitive Model of Reader Self-Positioning: Authentic Adoption, Reluctant Role-Play, and Rejection of “You”**

In the analysis above, we can see evidence of readers willingly or reluctantly adopting the qualities associated with the “you”s in the text across the lexias. All readers are thus placed in what Aarseth (1997) calls “a cybernetic feedback loop” (65) with the text/machine, a process specific to interactive media, in which “information flow[s] from text to user” via the modes of representation the text deploys “and back again” (65) via the interactive functions the reader is asked to perform. While the concept of the cybernetic feedback loop is valuable for modelling how digital reading works in general, it does not account for the diversity of the participants’ responses shown in the data above as well as the fact that some texts can invoke more than one addressee at the same time.

In his examination of second-person narratives in print, Phelan (1994) advocates reintroducing Rabinowitz’s (1977) concept of multiple audiences in order to characterise instances of “you” that appeal to or signal the existence of a particular type of narratee. Rabinowitz distinguishes between the reader and two different types of narratee: the “narrative audience” that retains a critical distance from the narrator’s claims and the “ideal narrative audience” that does not. The latter is defined as “the audience for which the narrator wishes he were writing” (134) because they accept the narrator’s assertions uncritically. As the preceding analysis has

shown, some of the participants in our study appear to recognise that there is more than one role that they can project into. We therefore observe some empirical evidence of Rabinowitz's and Phelan's audience categories in the processing of a second-person digital narrative. In particular, Lauren's assertion that the "you" is the "the character that I'm supposed to pretend to be", shows that the "ideal narrative audience" (Phelan) would unproblematically assume the identity of ("pretend to be") the character. However, assuming the position of the "narrative audience" (Phelan), Lauren knows she is "supposed" to be the character but resists or rejects it as a "distantly engaged reader" (Sorlin).

Phelan's (1994) audience categories provide vocabulary for describing the different potential roles that readers might observe. The preceding analysis has shown how Herman's, Walker's, Bell's, and Sorlin's models can also be empirically operationalised to examine the reader's capacity for feeling addressed by "you". However, while the existing categories can account for the reader's responses to "you", they do not fully capture the identity positions that readers adopt across the data sets. More specifically, in the analysis above, the data suggest that there are three positions that readers adopt in relation to the *TPM*'s use of "you":

- 1 An "authentic" position in which readers authentically identify with the "you"s. They are responding to "you"s as an "engaged reader" (Sorlin) in terms of Bell's (2022) "authentic participation" category. This can be seen in many of the responses to the second lexia in *TPM* in which readers identify with the "You are reading the signs" statement in terms of "you-as-reader".
- 2 A "rejecter" position in which readers are aware of the "you" address but refuse to take up the fictionalised position in terms of emotional investment or psychological projection into it. They must, however, temporarily assume the role simply by reading the text. They are thus responding to "you"s as a "distantly engaged reader" (Sorlin) in terms of Walker's "forced participation" category because it is impossible for the reader to continue in the text without reading the "you". This can be seen in the data when participants, such as Lauren, recognise that there is a role for them to assume and they resist it, but must assume it to continue reading.
- 3 A reluctant "role-player" position in which readers assume an identity or characteristic because the "you" has consistently coerced them into feeling that that position is at least partially true. This can be seen when readers respond to "you"s which exemplify Walker's "involuntary performative" type in which the reader cannot continue in the text without performing the actions suggested by the text, for example, when participants, such as Chloe, notice that they are being placed in a role that they then assume if only temporarily.

This cognitive model of reader self-positioning we offer above shows how readers cognitively process and respond to “you” types across the dataset. As the definitions show, there is some correspondence between Bell’s and Walker’s “you” types and Sorlin’s reader categories. Specifically, the “rejecter” and “role-player” roles show how readers negotiate forced participation and involuntary performative “you”s, thus providing a cognitive dimension to the existing typology of narrative “you”s. The “authentic” and “rejecter” roles can be compared to Sorlin’s engaged and distantly engaged reader respectively. However, what distinguishes our roles from Sorlin’s is the way in which readers are conceptualised. Sorlin focuses on the extent to which a reader is “engaged” or “distanced” by textual strategies, assuming that engagement correlates with acceptance of “you” and distance with rejection of it, particularly in cases of fictionalised reference. As our analysis has shown, however, reader responses to actualised address and double-deixis in particular are more variable than this. Readers can experience critical distance from the narrative while also assuming a “you” role both authentically and in a reluctant role-playing position. Readers can be engaged with the narrative while rejecting the “you” position. While our categories are defined as discrete above, readers can also move in and out of these roles throughout their encounter with the text; they might feel like themselves at some points and decide to role-play at others. Our model therefore attempts to capture the fluid roles that readers discursively negotiate and/or adopt in response to variable “you”s across a text.

## **Conclusion**

The results in our study demonstrate that readers attribute agency to the text in deciding who the “you” refers to and how they relate to the text. They tend to feel propelled to adopt a variety of character roles in the text, even if they then reject them. In support of some of the conclusions made in previous empirical research into second-person narratives (e.g., Brunyé et al. 2009; Brunyé et al., 2011) our results suggest that readers adopt a first-person, internal perspective in some instances of second-person narration. However, narrative “you” does not always cause readers to identify with that pronominal reference. In fact, the range of “you”s analysed in our study shows that the nature of reader identification with “you” is more nuanced and dynamic than previous research suggests.

Perhaps unsurprisingly, our results confirm Margolin’s (1990) theory and our associated prediction, outlined above, that readers will feel addressed by the “you”s in the text that they feel represent them authentically – e.g. when the text refers to a role associated with the digital reading experience – and that readers will resist the reference of those that do not. However, our participants did assume character roles as well and, in these



cases, readers tend to discursively accept and take up textual/discursive positions they perceive as positive, for example “you” as detective, but resist negative identity positions – e.g., “you” as psychopath – by reframing their relation to the text. To reflect the different reader positions reflected in the data, we have developed an empirically verified model of reader positioning which proposes “authentics”, “role-players” and “rejecters”.

Arguably, the level of discursive resistance that some readers adopted to certain identity positions of “you” shows not only the extent to which they felt it necessary to distance themselves from certain identity roles they perceived as negative, but arguably also the level to which they felt addressed. It is important to recognise, however, that the discursive negotiation present in our study was perhaps primed by the way the study was set up. Because a researcher was present while participants were going through the reading, and was continuously asking questions, readers may have felt more obliged to explain or negate any negative identity positions of “you” that could be related to them. In the reader-response data analysed above, however, there are several cases where the readers acknowledge the actualised address as being “you”-as-reader, but they do not accept the attributes associated with the “you”. Our study therefore provides empirical evidence of Herman’s (2002) double-deixis category. In particular, the readers’ resistant responses show how the ambiguous double-deictic category of “you” may lead to readers feeling doubly situated – i.e., embodying two addressee positions and thus perspectives simultaneously. In addition, resistant responses suggest that there is a “you” that the text wants the reader to be, and a “you” that the reader chooses to be. This chapter also shows how readers can assume multiple perspectives at the same time, providing empirical evidence of Phelan’s (1994) as well as Walker’s (2000), Bell’s (2022) and Sorlin’s (2022) frameworks.

In applying Phelan’s (2005) reader and Peplow et al.’s (2015) response types to the data, we have evidenced mimetic, synthetic, and thematic readings in response to *TPM*. Given the nature of the study design and its emphasis on reader/character identity, it is perhaps not surprising that readers focussed on the mimetic and synthetic aspects of the text, as opposed to thematic, as they attempted to make sense of the way that they were being positioned by “you”. The fact that the text predominantly uses actualised address and double-deixis also meant that readers did feel implicated as “you-as-reader”. Our new category of “automimetic response” provides a way of analysing and theorising that experience by reflecting the audience’s interest in and response to the way in which a text’s representation of them as “you-as-reader” corresponds to them and/or is believable. While this category has been developed in relation to *TPM*, as we will show in the chapters that follow, an assessment of the way in which the reader in the actual world is implicated in the storyworld forms an integral part of reader responses to digital fiction more widely.

## Notes

- 1 In previous theoretical work, we have developed a detailed diagram of narrative “you” typologies (e.g., Ensslin & Bell 2021: 153). The diagram offered in this book develops that to focus more precisely on the theoretical constituents of actualised address and, by implication, double-deixis.
- 2 In a pilot study, conducted in November 2014, we used a scale with seven points. None of the participants used all of the points on the seven-point scale, which suggested that the scale offered more granularity than the participants needed. We therefore reduced the scale to five options.
- 3 Names refer to individual transcripts and numbers to line numbers in those transcripts. The full dataset from this study can be accessed from the Sheffield Hallam University Research Data Archive at: <http://doi.org/10.17032/shu-170009>

# 3 Hyperlinks in Hypertext Fiction

## Introduction

In the previous chapter, we focused on ways in which readers of web-based hypermedia fiction construct their own identities vis-à-vis the text and its main characters, prompted by medium-specific uses of “you”. In this chapter, we shift our attention to another pervasive feature of digital fiction that has dominated digital, multilinear, networked *hyper*-textuality from its inception: the hyperlink. In hypertext fictions, individual units of texts – known as lexias – and/or other material, such as recordings and videos, are organised and connected through electronic hyperlinks (Ensslin & Skains 2017). Hyperlinks are thus key textual connectors between units of a hypertextual network, and while the earliest of these “network fictions” (Ciccoricco 2007) predated the web and were read on data carriers like floppy disks and CD-ROMs, from the mid-1990s onwards they moved to web browsers – and this is where we find them today. In fact, they have come to align with the principles of third-generation electronic literature (Flores 2019), making link-based storytelling a highly accessible form of web-based creative writing.

Linguists and literary media scholars of the 1990s and 2000s were quick to develop theories of hyperlinked textuality and of the narrative, poetic and pedagogic affordances of literary hypertext (e.g., Landow 2006; Joyce 1995; Ensslin 2007). In this scholarly landscape, numerous typologies emerged that categorise the different types and functions of hyperlinks in digital fiction (e.g., Parker 2001; Ryan 2015). Other theories have explained the cognitive effects of hyperlinks on the reader (e.g., Bell 2014; Miall & Dobson 2001), establishing that the associative and creative linking patterns in experimental literary hypertexts, such as Michael Joyce’s (1987) *afternoon* and Stuart Moulthrop’s (1991a) *Victory Garden*, tend to lead to cognitive fatigue in readers “struggling to construe a mental model of the plot, setting, and characters in a hypertext fiction” (Ensslin 2020: 8). This is because literary hyperlinks often place readers in unfamiliar reading

spaces that seem unrelated or at least not cohesively linked to the lexias they depart from. They thus follow a radically different function from hyperlinks in informational hypertext, such as journalistic or scientific web pages.

Leaving aside the empirical studies examining effects of hypertext reading more broadly, as we show below, little research has taken an empirical approach to hyperlinks in hypertext fiction, with few existing empirical studies prioritising the analysis of narrative comprehension over narrative experience. To address this gap, we present a new method for gathering reader responses to individual hyperlinks via structured interview. We present results from a reader response study designed to examine the different types and the associated cognitive effects of hyperlinks in digital fiction. Synthesising a stylistic analysis of Lyle Skains' (2017) third-generation hypertext fiction *The Futographer* with results from our empirical research, we suggest ways in which readers of digital fiction employ specific cognitive strategies to parse hyperlinks within multilinear hypertext narratives. We show how our new think-aloud protocol is designed to capture reader engagement with hyperlinks in terms of deliberation and decision-making. We provide a theoretically synthesised and empirically testable typology of hyperlinks for digital fiction, and suggest ways in which digital fiction readers employ specific cognitive strategies to parse multilinear hypertext narratives. Our results suggest that throughout the reading experience, readers move from a more automimetic, authentic reading stance to a more distanced, mimetic one. To account for this, we utilise and expand the cognitive model of reader self-positioning proposed in Chapter 2 – comprising authentic, reluctant role-player, and rejecter – to include a willing role-player position. We also show that readers process the potentially disruptive effect of hyperlinks through compensatory strategies, reflecting an overwhelming desire to read for the plot, but that mediality is a key component of their reading strategies.

### **Hyperlinks in Hypertext Fiction**

Hyperlinks are an integral part of any kind of hypertext. They physically connect textual or visual items and they also signal a relationship between those items. As Slatin (1990) notes, “a hypertext link is the electronic representation of a perceived relationship between two pieces of material” (877). Since the emergence of hypertext in the 1980s, theorists have considered the significance of the hyperlink in both informational and literary hypertext in terms of agency and narrative coherence. Initial theory argued that hyperlinks provide readers with narrative control and thus agency to navigate and co-construct the text because they provide them with informed choices (e.g., Aarseth 1997: 4). Most hyperlinks that appear in informational hypertext, such as the many web pages housed on the web, use

hyperlinks to clearly and unequivocally indicate their purpose and directionality to the reader very clearly in advance. They can, therefore, empower the reader, allowing them to make informed choices about their pathway through networked documents. The same is not always true of hypertext fiction, however. As Landow (2006) notes,

in contrast to informational hypertext, which must employ rhetorics of orientation, navigation, and departure to orientate the reader, successful fictional hypertext and poetry does not always do so with the result that its readers cannot make particularly informed or empowered choices.

(222)

In a hypertext fiction, the linked term or icon might not always directly indicate what will be found at the destination *lexia*. While readers might surmise where the link will lead, in hypertext fiction they must often decipher connections between link and *lexia* content after the link has been followed. As Ciccoricco (2007) suggests, “the process of linking itself implies a rhetoric of repeated disorientation and reorientation” (80). Since hyperlinks are not always immediately indicative of the destination *lexias* to which they lead, semantic associations are sometimes made, not in anticipation of the destination *lexia*, but in retrospect (cf. Landow 2006).

More recent research has considered the cognitive effects of hyperlinks in hypertext fiction on the reader. Tosca (2000) uses relevance theory to explain the way in which readers process hyperlinks. She suggests that readers make inferences in advance of following a link in order to predict what they will find, subsequently searching for relevance once they reach the destination *lexia*. She concludes that a link has “a sort of ‘suspended meaning’ that ... [isn’t] confirmed until we have seen where it takes us” so that “from the point of view of pragmatics, links force us to make meaning *before* and *after* travelling them” (n.p., emphasis original). As such, hyperlinks do not interrupt the flow of meaning, but rather enliven it. Bell (2014) builds on Tosca’s work and develops schema theory to show how individual links work with or against readers’ existing schemata to either confirm or revise their predictions about what they will find when following a link. She concludes that links express a relationship between the link and its destination that can be denotative, where the meaning of the linked words clearly indicate the destination *lexia*, as is typical in informational hypertext. Alternatively, the relationship might be connotative, where the hyperlinked words or phrases are only loosely associated with the destination *lexia*, requiring more considered interpretation; this is more often the case in hypertext fiction.

The preceding overview has shown the ways in which hyperlinks have been theorised in terms of both the way a reader processes them and the

effect they have on the reader. However, to date, these hypotheses have not been empirically tested. Existing empirical studies of hyperlinks in hypertext fiction largely focus on their universal defamiliarising effects. Miall and Dobson (2001), for example, conclude that, because readers in their study took longer to read a hypertext with multiple links per lexia and reported more difficulty with this text, hypertext fiction distances the text from the reader and that the “absorbed and personal mode of reading seems to be discouraged” (12, cf. Mangen 2008). Pope (2006, 2010) also concludes that hyperlinks increase readers’ cognitive load and therefore might negatively impact reading and comprehension. These empirical studies largely focus on measuring reading times and narrative comprehension, rather than on the different types of hyperlinks readers encounter in digital fiction and how readers then approach and cognitively process these links. Thus, while these studies provide useful conclusions about the effect of particular hypertext fictions overall, they do not examine how readers process and understand hyperlinks more specifically.

Our research aims to empirically test existing theory that suggests readers anticipate in advance where a hyperlink will lead and then retrospectively process the semantic associations they believe are implied by that hyperlink. Our central research question was therefore: what is the relationship between what readers expect to find and what they do find when following hyperlinks in hypertext fictions? However, not all hyperlinks work in the same way and numerous typologies have been developed to capture the different types of hyperlink that exist in hypertext fiction. Our empirical research thus also explored whether reader responses to hyperlinks can be categorised according to existing categories of hyperlinks, as well as what the data reveal about hyperlinks and reader strategies that are not captured in these existing typologies.

### **Typologies of Hyperlinks in Hypertext Fiction**

In order to categorise hyperlinks according to their various functions in hypertext fiction, we developed a meta-typology that consolidates and expands existing hyperlink typologies. Based on “some rudimentary applications of linking strategies in [his own] hypertext short story” (n.p.), “A Long Wild Smile”, Parker (2001) distinguishes between two main types of links: “functional links”, which have a clear navigational and therefore denotative function; and links “that produce a literary effect”, or in short, literary links. Literary links work on the basis of creative and idiosyncratic association. They may not mark a precise and unambiguous “relationship between the two text nodes” but rather a more “subtle” effect that “manifests itself because of the relationship”. The effect is therefore “not being handled by the text itself. It’s being handled by the link” (Parker 2001).

Parker subdivides functional links into three, and literary links into five subtypes as follows:

a Functional links:

- 1 *Blatant links* “tell the reader exactly what information will be revealed when activated” and can therefore be likened to a footnote in a non-fiction text.
- 2 *Filler links* provide a reader with backstory if they have not yet reached a lexia in which this information is given, but which they need if they are to understand the current lexia. The example Parker uses to disambiguate filler links from blatant links is a link from the phrase “the same walking mucous container” to a lexia that provides additional context helping readers who do not yet know, from the lexias they have visited, who the “walking mucous container” is. A blatant link would provide the information in descriptive form, like a gloss. A filler link, conversely, embeds it in narrative context that is part of the fictional plot.
- 3 *Random links* randomise access to a number of target lexias. This can, Parker suggests, “break readers out of [linking] loops”, which can occur in some hypertextual structures.

b Literary links:

- 1 *Emotive links* are “inten[ded] ... to elicit a kind of emotional response from the reader”. In Parker’s example, the link “if I were her” does not, as might be expected, lead to a lexia where the first-person narrator considers what he would do or think if he were “her”, his fiancée. Instead, it leads to a lexia that displays a flirtatious conversation between the fiancée and her lover, which shifts the reader deictically into a different narrative space, which the narrator, due to his restricted point of view, does not have access to. This shift, afforded by the emotive link, is likely to evoke amusement, pity, or some other kind of affective reaction in the reader that is not primarily cued by the text in the lexia but by the link that marks the deictic shift (see Chapter 4 for more extensive engagement with deictic shift theory).
- 2 *Lateral links* “take a sideways step in the trajectory of a narrative, outside of the main web of the text”. Unlike filler links, “the fill is not necessarily needed”. So, unlike the key information needed to understand and contextualise the narrator’s use of “walking mucous container”, a lateral link provides information that does not directly relate to the text in the link, but rather it takes the reader to a lexia that provides information about a character, for example, in a more haphazard manner.

- 3 *Complicating links* provide information that contradicts and exceeds what can be expected of a character, for instance. It literally complicates an aspect of the narrative. In Parker's example, readers who follow the link "what kinds of things she does" learn that the narrator's fiancée suddenly decided to smoke in her apartment, which she had never done before and which was inconsistent with her usual cleanliness. Complicating links thus have an emphatic literary effect as they contribute towards a more rounded, multifaceted understanding of the narrative.
- 4 *Temporal links* are used to bring two moments in time together "simultaneously on the screen" to create an aesthetic effect such as aligning the consciousness of two separate characters: "he gets up" links to the first-person monologue of the fiancée's lover, whose thoughts the reader can thus perceive in quasi-simultaneity with those of the narrator, who is hiding under the couple's bed using surveillance equipment. The literary effect is multiperspectivity, yet rendered in a medium-specific, hyperlinked way that further aligns story time and discourse time.
- 5 Portal links, finally, "act as a [bidirectional] gateway between two nodes of a hypertext" that, upon click, take the reader back to the previous link, thus creating a looping experience that can have humorous or startling effects. Parker's example augments the navigational loop with two almost homophonous links, "Do you ever write rhyming poetry?" and "Did you ever ride ponies?", which signal a misrepresentation of the narrator's surveillance equipment, thus exposing the irony of its malfunctioning. The fact that readers cannot break out of this particular loop once entered further reinforces the medium-specific, aesthetic meaning of the portal link.

We would argue that some of Parker's categories, such as filler links and lateral links, are too similar to one another and too open to interpretation to be operational as more global analytical concepts outside "A Long Wide Smile". Furthermore, Parker's work has been criticised for focusing on his own personal motivations for implementing hyperlinks rather than the effect(s) they have on readers. As Rettberg (2002) notes, "the notion of 'literary effect' ... has its difficulties when moved from the plane of the author's intention to that of the reader's interpretation" (n.p.). Parker's typology is derived from his own writing practice, rather than being generated from a wider corpus. In addition, he does not account for the fact that some links can be both "functional" and "literary"; all "functional" links can, in theory, "elicit a kind of emotional response from the reader" and can therefore be classified as "emotive" as well. Despite these methodological limitations, however, Parker offers a useful sense of the different



ways in which links can be used in hypertext fiction, and his concept of the “blatant link” in particular has been adopted widely as a constituent of many hypertext fictions.

To remedy the issues associated with Parker’s typology, Ryan (2006, 2015) draws on a wider body of creative and scholarly work (e.g., Bernstein 1998; Strickland 1997). In her first typology, Ryan (2006: 110–111) proposes six different links types:

- 1 *Spatial links*: as connecting elements in hypertext networks, spatial links “run against the grain of temporal development ... and reorganize the text into formal patterns that can only be apprehended by contemplating it from a synchronic perspective”. While Ryan likely refers to explicitly spatial, stacked hypertext like Jim Rosenberg’s (1994) *Intergrams*, for example, she describes a general function of hyperlinks that affords spatialised visualisation and navigation. This is particularly pertinent in some first-generation hypertext poetry, such as Kathy Mac’s (1994) *Unnatural Habitats* (see Ensslin 2022).
- 2 *Temporal links* organise individual lexias into a sequence of events that can be narrativised as “succeed[ing] each other in time”. Such narrativisation is considerably more straightforward in cognitive terms in partly sequentialised hypertext fictions like Shelley Jackson’s *Patchwork Girl* and its “story” path than it is in largely rhizomatic works like, for instance, Joyce’s (1987) *afternoon: a story*. Ryan’s concept of temporal links thus deviates from the synchronising meaning of Parker’s.
- 3 *Blatant links*, which Ryan borrows from Parker (2001), are essentially “labels” that “give the reader a preview of the target lexia, enabling her to make an informed choice”. They are most typically found in choose-your-own-adventure style hypertexts that follow patterns like this: “If you want Cinderella to leave the ball at midnight, click here; if you want her to stay at the ball, ignoring her Godmother’s warning, click there.”
- 4 *Simultaneity links*, according to Ryan “allow the reader to jump from one storyline to another, in order to find out what different characters in different locations are doing at the same time”. She reframes Parker’s example from his “complicating” category (“what kind of things she does”) to more broadly illustrate cross-perspectival navigation.
- 5 *Digressive and background-building links* have a decelerating effect on the reader’s narrative experience. They “suspend momentarily the development of the story” to give additional information or provide access to peripheral or paratextual material. With this category, Ryan implicitly conflates Parker’s filler and latent links, and potentially also his emotive links, into a more narratologically plausible category.

6 *Perspective-switching links*, which align with Parker’s portal links, are bidirectional and can “take us into the private worlds of different participants in the same episode”. Using Parker’s example, Ryan emphasises the potential of perspective-switching links to expose unreliability on the part of a narrator or character – in this case, the narrator, who unsuccessfully tries to spy on his fiancée’s love life.

In subsequent work, Ryan (2015: 193–194) suggests hyperlinks can be classified according to nine functions. While she does not provide labels as in her first typology, she defines them as links that:

- 1 “let the reader explore many possible futures of the textual world”,
- 2 “let the reader explore alternative versions of a reasonably solid core of facts”,
- 3 “shift perspective on the textual world”,
- 4 “control the reader’s progress in the discovery of facts”,
- 5 “suggest analogical relations between segments”,
- 6 “allow the user to blow up certain scenes or passages to get a close look”,
- 7 “interrupt the flow of narration”,
- 8 “provide background information, explanations, supporting material, and intertextual references”, and
- 9 “keep the textual machine going” by generating text.

While there are some new link types in this 2015 version, some are derived from the 2006 typology (e.g., “perspective-switching” in the 2006 version and “shift[s] perspective on the textual world” in 2015). This implies that, with the growing body of hypertext fictions, new link types have been and will continue to emerge that reflect new affordances and creative possibilities of evolving digital media for multilinear narrative. These technological transformations also engender new ways of hyperlink reading and cognitive processing that can be studied empirically.

As the preceding overview shows, commonalities can be found across the typologies. Both Parker (2001) and Ryan (2006, 2015) acknowledge that a hyperlink can be “blatant”, indicating in advance where it will lead. Each typology also includes link types that allow the reader to explore aspects of the storyworld in more detail, such as different points of view (“portal” and “perspective-switching” links) or by providing background information to a scene (“filler” and “digressive and background” links). The typologies do, however, differ in terms of the way that they characterise the function of some links. Parker (2001: n.p.) proposes that complicating links act as “a way of ... highlighting parts of the text” and thus are intended as a “kind of emphasis”, whereas Ryan (2015: 194) proposes similar functions in terms of links that “allow the user to blow up certain

scenes or passages to get a close look” and/or “interrupt the flow of narration”. What the typologies show overall is that Ryan is almost exclusively concerned with the narrative functions of links, whereas Parker is mostly interested in links that serve a “literary”, aesthetic, or affective purpose.

### **Our Empirical Study on Hyperlinks**

Existing typologies consider links in a rather limited sense because they do not consider the process of prediction and orientation that happens when a reader processes a link. Here we offer a categorisation in terms of the overall function of links during the reader’s experience – i.e., the combination of their intended effect on the reader, what effect they imply to the reader in advance, and what effect they have on the reader once activated. Reader responses to the links (that is, what they predict they will find and what they actually find when following the link) can then be evaluated against the hyperlink types so as to empirically test the categories.

Based on Parker, we primarily distinguish between links that have a predominantly narrative function and those with a predominantly affective function. Whereas narrative links (e.g., Ryan’s [2006] perspective-switching) are functional in that they are designed to advance the plot or provide additional narrative exposition (e.g., characterisation or backstory), the primary function of an affective link (e.g., Parker’s random link) is to provide a subtextual poetic effect on the reader that is left open to interpretation. With influence from all typologies, we then distinguish between links that allow the reader to navigate the hypertext and those that let them explore the text. This latter distinction is drawn from Persson’s (1998) investigation of user behaviour in digital environments, in which he proposes that “navigation” “refers to the situation where the navigator has a clear and quite precise goal or task, and [exploration] applies when the navigator only has vague notions of the goal or just want some general overview” (182). Thus, while navigation is goal directed, exploration is not. This distinction accounts for the difference between links that will advance the plot (e.g., temporal [Ryan 2006]) and those that provide information that is non-essential to plot development but that enrich the narrative in some way (e.g., that “let the reader explore alternative versions of a reasonably solid core of facts” [Ryan 2015: 194]).

Our new meta-typology therefore comprises four categories of hyperlinks:

- 1 **Narrative Navigation (NN)**: Links that lead the reader down a narrative path. The link term is designed to clearly indicate the destination to which it leads. The context and the term used lead readers to expect that the link is “blatant” and will therefore lead to material that is implied by the link term and that will be related to the host lexia. When followed, the reader’s expectations will be confirmed.

- 2 **Affective Navigation (AN):** Links that lead the reader down a narrative path, but do not unequivocally indicate the destination to which they lead. The context and the term used give readers some sense of what they might find when following the link. The relevance of the link term becomes clearer once the destination lexia is reached, although meaning can remain obscure.
- 3 **Narrative Exploration (NE):** Links that offer the reader additional layers of narrative such as parallel storylines, backstory, perspective-switching, and revisited passages of text. The link term usually indicates that it leads to some kind of material relevant to the narrative, but it may not unequivocally indicate its destination. The reader will anticipate that the destination will have meaning relevant to the narrative, plot, and/or character. If a link's destination is not initially apparent, its meaning generally becomes clear retrospectively.
- 4 **Affective Exploration (AE):** Links with the sole purpose of eliciting an affective response, with no navigational or narrative purpose apparent, either initially or in retrospect; these instead generate a more ambiguous aesthetic/poetic effect. The link does not clearly indicate the content to which it leads, and readers may well have difficulty forming an expectation. Once followed, readers often cannot conclusively assign meaning, even retrospectively. The result is that readers will attempt a connection which is more open and reflective of the poetic intent.

Our categorisation aims to capture both the purpose of the link (from the writer's point of view, they progress from blatantly functional to the more playful, poetic, and/or experimental affective links) as well as how the reader cognitively processes those links both in anticipation of and retrospectively following activation. Clearly, some types are more difficult for readers to process than others, and individual links may overlap two or more categories. For the purpose of this study, we focus on those most easily identifiable in one category or another. While narrative links offer readers some clarity about the shape and content of the storyworld, affective ones may confuse the reader because their ambiguous reference and purpose often counters the familiar schema of links (Bell 2014); following them requires retrospective interpretation to determine their meaning (Tosca 2000). Affective Exploration links, which neither signal in advance where they will lead nor offer a quick and clear subsequent meaning, can be seen to cause the most schema disruption, while Narrative Navigation links, designed to be the clearest form, will cause the least schema disruption (see Figure 3.1).

Our empirical study was based on the hypertext fiction *The Futographer* (2017) by research team member Lyle Skains. The work encapsulates all four link types listed in our typology. Skains is an established prose writer who has been writing hypertext fiction since 2008. While *The Futographer*

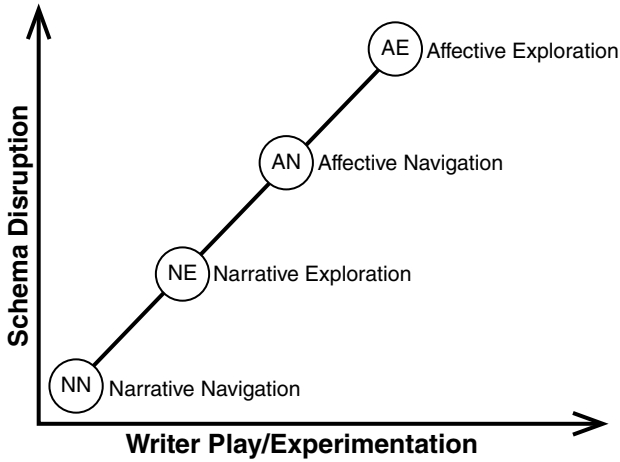


Figure 3.1 Disruption of schema in relation to writerly/poetic experimentation with links in hypertext fiction

was written with this study in mind, it was primarily intended for a wider public audience. The short story was produced using Twine, a third-generation (Flores 2019), open-access, web-based hypertext authoring software. Typical of hypertext fiction, *The Futographer* is comprised of lexias connected by hyperlinks that often allow readers multiple pathways through the text. It is written using second-person narration and explores issues around social media, online anonymity and privacy, and computer-mediated communication: the narrative “you” receives pictures of their future self from a stranger on social media and makes choices about what they want to do about it.

Given that the study aimed to test reader responses to hyperlinks, Skains incorporated a range of links according to our meta-typology. Once the text was complete, two other members of the project team independently categorised the links according to our meta-typology. Links were classified as NN (65%), as NE and AN (each 13.75%), and as AE (7.5%). Any links whose classification did not reach a consensus between the team members were discarded from use in the reader interviews. This composition was aimed to make the text relatively easy for the readers to navigate overall because the most schema-disruptive link type – AE – makes up a relatively modest proportion of the text and the least schema-disruptive type – NN – makes up the majority. This particular ratio of link types aided in ensuring that readers were not overwhelmed with schema-disruptive hyperlinks that might detract from their overall understanding of the narrative and thus cause them to lose focus on the hypertextual reading process overall.

*The Protocol*

Nineteen readers (18–34 years old), who were all Creative Studies and Media students at Bangor University (Wales, UK), participated in the study in 2016. In terms of purposive sampling, they were chosen because they had previously read and/or written hyperlinked digital fiction and were therefore familiar with the potentially puzzling effects of multilinear writing (see also Chapter 2). The participants were told that we were interested in how people interpret hyperlinks in digital fiction. They then read *The Futographer* at a desktop computer in the presence of a researcher. The researchers chose eleven lexias in the hypertext story that would offer the reader experiences of all four link types, and that would be visited by all participants regardless of variations in their reading path. During the reading, the researcher isolated the hyperlink(s) shown on the screen and, if there was more than one in the lexia, asked “How do you decide which link to click on?” Participants were always asked “What thought processes do you go through when you see and/or decide to click on this hyperlink?”, and finally “What in the text or context influences your decision?” For each tested hyperlink and subsequent lexia read, participants were then asked:

- What is this part of the text about?
- Does this relate to the previous part of the narrative? If yes, how so?
- Did you expect it to lead to this kind of thing?
- In what ways does it confirm or contradict what you expected to find?
- What in the text or context makes you think this?

The combination of questions was designed to prompt participants to provide as much information as possible, as close to the event as possible, about the thought processes they went through when they encountered links, how these thought processes affected their decision-making, how they cognitively processed and interpreted the links, and how the links affected their reading experience. Seven NN links, four NE links, six AN links, and five AE links spread across eleven lexias were tested per participant. In total, participants were asked eleven times about the selection of hyperlinks on the screen, and each reading session took around 50 minutes.

The reading session concluded with a short, structured interview in which participants were asked about hyperlinks in the text in general. Both reading sessions and interviews were audio recorded, transcribed, and coded using NVivo. The NVivo coding of the qualitative data focused on identifying specific cognitive strategies participants adopted to parse the hypertext, to what extent participants felt influenced by the text or context

when selecting a link to follow, and which type of links were preferred by participants when given multiple types.

### Analysis

Our analysis focuses on two lexias in which a variety of different hyperlink types were tested. We maintain that the function of hyperlinks can be identified systematically via our meta-typology but that readers' responses can also be analysed stylistically to show how this feature is conceptualised. Based on our analysis, we consider how these responses provide insight into how readers process and respond to hyperlinks, as well as how readers construct and deconstruct their own persona as an automimetic element of the plot.

#### *De(con)structing the Automimetic Reader*

Figure 3.2 depicts the link structure of the second lexia in *The Futographer* in which we paused the readers (lexia 7). By this point, the narrative has established “you” as the protagonist, whose story is related in the second person. “You” is an avid social media user with hundreds of Facebook friends, very few of whom, however, would ever post pictures of “you” or tag “you”, except one, mysterious new friend named Tiresias Goodfellow,

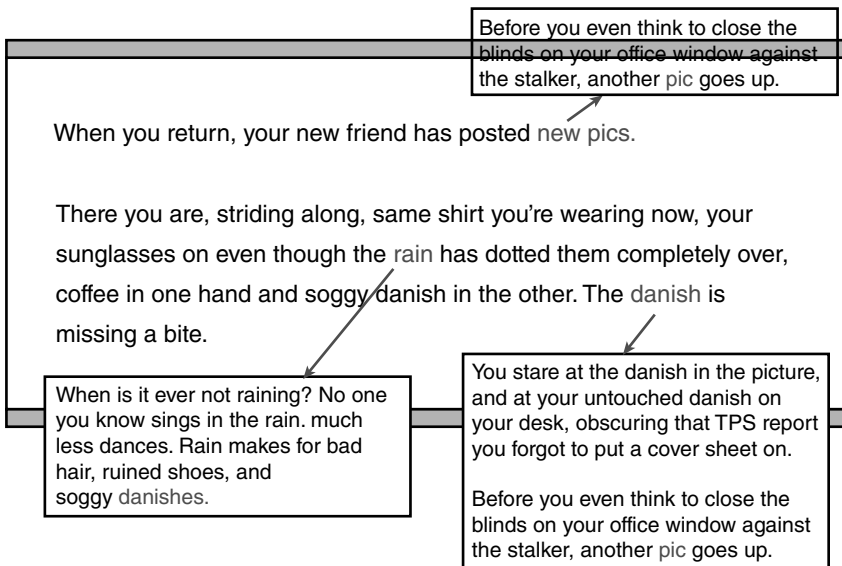


Figure 3.2 Structures of hyperlinks in lexia 7 of *The Futographer*

who has been posting new pictures of “you” at regular intervals without the protagonist’s knowledge. The situation in Figure 3.2 shows the protagonist baffled to find that, after their return from a coffee break, their “new friend” has posted “new pics” again, showing the protagonist in exactly the same shirt they are wearing at that moment, with sunglasses, the coffee, and the Danish pastry they just consumed a few moments ago. The lexia is comprised of three sentences, each containing one hyperlinked word. The hyperlinks “new pics”, “rain”, and “danish” are represented in bold and underlined font. The arrows connected to the different hyperlinks show which lexia readers see if they click on the respective links.

Since this lexia takes place relatively early in the reading session, the participants in our study were still familiarising themselves with the protagonist and potential plotlines. Prompted by the first interview question, “What is this part of the text about?”, participants gave a range of responses, half of which (50%) are mimetic and focused on plot elements like “rain mak[ing] for bad hair ... and soggy Danishes” (Josh),<sup>1</sup> as well as the growing suspicion that the protagonist has “a stalker” (Anna, Mariela, Ping Yee). Notably, the other half of the responses blend mimetic and/or synthetic elements with automimetic references to themselves as readers in the first or second person, thus merging the protagonist “you” ontologically with their own extradiegetic identity. Anna, for example, constructs a meta-aleptic blend between what is going on in the storyworld with a hypothetical, real-life situation: “you’re in your professionalism standard and um when you’re trying to just get on with your work, another – the stalker – posts another photo, so it’s basically coming ‘round you every day now so it’s getting more and more worrying,...frustrating”. Her response reflects an authentic (see Chapter 2) affective state that projects her as proxy-protagonist “you” into the storyworld and, vice versa, shows a bleed effect in the actual world, thus constructing her role and the feelings generated by the reading experience (auto-)mimetically. This double-deictic effect is further augmented by the possibility of “you” referring to a generalised, collective audience, also known as “pseudo-deictic” “you” (Herman 2002; see Chapter 2). Anna’s response can thus be seen as triply-deictic evidence of a strong authentic response that not only integrates her own automimetic stance but also widens the frame of reference to a more generic readership.

In a more synthetically oriented response, Kieran comments that the lexia

“is kind of giving you a bit more information as to who and ... what the situation is ‘cause before it was just a weird person that you had no idea where they were, what they were doing, um just adding pictures of you onto the internet, whereas now it’s kind of clarified that – either that the character’s assumed or it is set within that you’re ... kind of within the um – oh what’s the word (2) diegesis, is that it?”



His response again reflects an ontological blend between the worlds of the automimetically constructed protagonist (“you”) and that of Tiresias (“they”), yet he links this observation with a metafictional comment about the narratological role of this lexia in the hypertext as a whole.

The preceding examples show how readers construct their own automimetic role at the beginning of the hypertextual reading experience. Later on, this blending effect between fictional and real worlds diminishes. Figure 3.3 depicts the link structure of lexia 37, which participants encountered towards the end of their reading session, and in which they have to choose between two hyperlinks: “Last summer” and “thing”.

At this point in the narrative, readers have read that “you” has travelled to London in order to help their friend “Andie”, who has been mugged. There is a confrontation between Andie and “you” as “you” belittles the romantic relationship they had together “last summer” as merely “a thing”, which Andie felt to be something more serious.

In response to the interview question, “What is this part of the text about?”, participants gave predominantly mimetic answers, thus marking a shift away from the strong automimetic tone observed in response to lexia 7. In fact, only one participant still referred to the protagonist in the first person with most referring to them in the third person. This suggests

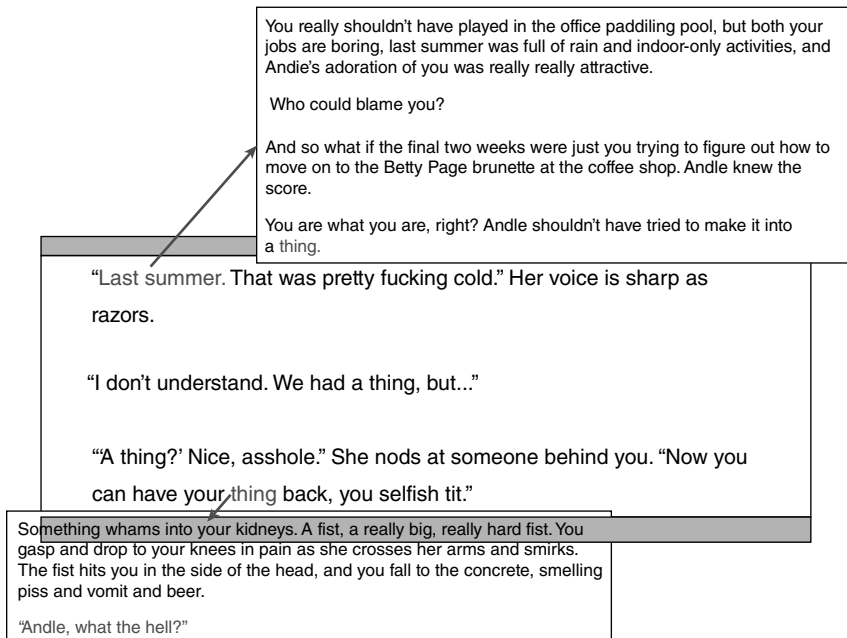


Figure 3.3 Lexia 37 with hyperlinks “last summer” and “thing” in *The Futographer*

that the automimetic reader is deconstructed in the latter half of the narrative. Alfie, for instance, explains this as a feeling of becoming “separat[ed] from the character”:

*Alfie:* Even though it is in second person, um I – I still don’t want this character to end up in a ditch and die, but you know, hey, what are you gonna do?

*R:* So why is it separating you more from this character, you feel?

*Alfie:* Because the narrative is giving me detail ... that is not part of me... It is explicitly giving me something that I have never experienced.

(Alfie, 674–681)

This dissociation between reader and protagonist is marked by a shift of the referent of “you” from a doubly deictic hesitation to fictional reference. This shift is caused by the processing of additional narrative detail that conflicts with the reader’s perceived reality and identity: “that is not part of me ... that I have never experienced” (see also Chapter 2, where we discuss the example of “your” hands, dripping in blood” that trigger a cognitive shift towards extradiegetic reader identity). The automimetic reader Alfie thus transforms into a more ontologically distanced, mimetic reader that engages in a form of imagined role-play that resembles our category of reluctant role-play (Chapter 2). However, in this particular case, the reader’s response does not reflect a negative stance. On the contrary, it signals an element of care and concern vis-à-vis the possibility that “this character [might] end up in a ditch and die”. In other words, what can be observed here is a form of “voluntary performative” (Bell 2022) not seen in the data in Chapter 2. In this new case of reader positioning, readers willingly adopt the role of “you” as a narrative experiment. The position thus reflects an affective emotional relationship with a fictional character whose identity the reader willingly assumes at least partly and/or temporarily yet whose future is not within the scope of the reader’s agency. We refer to this affirmative stance towards the player-character as “willing role-play”, thus refining and further differentiating Bell’s (2022) category of “voluntary performative” and our own concept of readerly role-play in digital fiction.

### *Reading Strategically*

Having established readers’ comprehension and discursive construction of the information given in the selected lexias, we now examine what kinds of strategies readers followed in choosing hyperlinks, and how their expectations of what lies behind a hyperlink matched their experience of actually reading the target lexias. For our analysis, we focus again on lexias 7 and 37.

In lexia 7 (Figure 3.2), the noun phrase “new pics” is linked to a lexia in which “you” discovers they have been tagged in another picture on Facebook. We therefore classified it as a NN link because it advances the narrative, is designed to indicate its destination relatively clearly via the use of a common noun, and, once followed, there is an association between the noun phrase and the material about photographs in the destination lexia. In the remaining two sentences, the photograph is described. Both destination lexias here – “rain” and “danish” – provide information about the objects in the photo. However, because “danish” explores something from the present scene in more detail, it is defined as an NE link; conversely, as “rain” offers a philosophical reflection on rain that neither advances the narrative plot nor offers additional exposition, it was classified as an AE link.

In terms of link choice, fourteen participants clicked on “new pics”, three followed “rain”, and two clicked on “danish”. Most participants (7/14) who chose “new pics” explained that they did so because it seemed to be the most relevant link to the narrative. Three participants said they were curious about the pictures or interested in seeing them. A further three stated they were both interested in the pictures and felt that the other links were not relevant. One participant stated that it was a combination of curiosity and visual prominence that made her click on “new pics”, as it was the first link she saw. This latter justification supports existing theory (Stockwell 2019: 25) suggesting visual prominence results in attracting readers’ attention and also that the order of the links “seems to be the determinant factor for choosing a hyperlink” (Protopsaltis & Bouki 2005: 165). However, the fact that only one participant out of fourteen decided on this basis does not provide universal support for this theory.

In the following excerpt from the data, Holly discusses why she opted for “new pics”:

*Holly:* Okay, well um I think I’m gonna click on the new pics thing because I mean, it doesn’t matter to me that there was rain, doesn’t matter to me that, you know, the Danish ...that’s not really that relevant, it’s the //pictures that I ... think are more important, because that’s like the evidence, really.

*Researcher:* Okay, so what is – what in the text or context would you say influences your decision to go for that one?

*Holly:* Um well ... firstly, like layout-wise, it’s the one that’s split apart from the others, so ... which – you notice it straight away ... and secondly, ... like I said, ... the fact that there was rain and the fact that there’s a Danish really isn’t that important ...I’m more interested in seeing all these photos I’m supposed to be in, you know?

(Holly, 143–59)

Like most participants who found “new pics” most relevant, Holly notes, in a synthetic response that pays attention to the visual composition of the text, that it seemed to be the “most important” link, referring to it as “the evidence” and arguing that it “doesn’t matter” to her that there is “rain” and a “Danish”, as these are not “relevant”. Relevance here seems directly linked to what is impacting the narrative element of character. She states that “new pics” is visually more salient because it stands apart from the rest of the text, which “you notice...straight away” and that she is more interested in “seeing all these photos I’m supposed to be in”. This latter justification automimetically shows Holly has adopted a first-person, internal doubly situated (Ensslin 2009) perspective and thus a high degree of identification with the protagonist “you” (see Chapter 2).

Participants who clicked on “rain” did so because they felt that: “new pictures would seem to be quite an obvious answer”, while “rain” gives potentially significant information “about the possibility of the photo being taken at – at a certain time of day” (Josh, 144 & 137–138); “new pics” seemed to have been explained already, and that it was more interesting in terms of “why there’s ... sunglasses when it’s raining” (Katie, 92); or that it allowed the reader to “explore a different way – different method” (Luke, 78). Readers who followed “danish” chose to do so because it seemed salient, and therefore most relevant to them: Laura mentioned that she found it funny and intriguing that emphasis had been placed on the fact that the Danish “is missing a bite” (Laura, 136–138); Jack decided to click on “danish” because it was also mentioned in the previous lexia, and the repetition suggested it might be important (Jack, 130–139). The arguments for picking “rain” or “danish” rather than “new pics” suggest that despite not opting for a denotatively clearer NN link such as “new pics”, readers tended to also choose links that seemed most relevant or interesting to them. Overall, in these rather pragmatic or strategic choices, we can therefore see a preponderance of medial responses that weigh up the relative significance of textual information that they think they will find by following a link as compared to other parts of the hypertext.

After following the hyperlinks, participants were asked to explain what the destination lexia was about, whether – and if so, how – it related to its source link, and how it contradicted or confirmed what they expected to find. With “new pics”, “rain” and “danish”, all nineteen participants, regardless of the link they had clicked on, felt that the destination lexia related to the activated link, but not all participants had expected what they encountered. Of those who opted for “new pics”, one participant felt he had expected it, two did not provide a clear answer, and eleven felt the destination lexia was unexpected. Four of the latter group explained that they had expected to see actual pictures, implying that they interpreted “new pics” as a NN link but that the actual material did not match with

their expectations. Others were surprised by the change in tone and/or atmosphere (4/11); had anticipated more talk about different pictures (1/11); for the pictures to stop (1/11); or thought they would see a more gradual appearance of pictures (1/11).

In the following extract, Alfie, still in automimetic mode, observes that he – referentially conflated with the protagonist – has a stalker. He uses this automimetic stance to justify his selection of “new pics” in terms of the suspense or even anxiety he-cum-protagonist (“you”) is experiencing vis-à-vis this stalker:

- Alfie:* Just finding out that suddenly this person is posting pictures of you.
- Researcher:* And so does it relate to the previous part of the narrative?
- Alfie:* Yes, it’s – it’s very blatantly clear that everything follows ... I wouldn’t say follows a structure as it were, but it definitely follows on from the previous ... lexia, so there’s ... a definite link there, there’s no confusion about it.
- Researcher:* Okay, so did you expect it to lead to this kind of thing then?
- Alfie:* I mean, narratively, I’m kinda – I’m kinda – what – what’s the phrase I’m looking for – preparing for the worst, hoping for the best ... /I don’t want this character, who is ostensibly me ... To have a stalker, but I’m – yeah, yeah, it, it – there’s a stalker coming ... I feel it, just inside me.
- (Alfie, 172–190)

Alfie does not say whether he expected the content in the destination lexia. However, he conceptualises the hyperlink “new pics” as “very blatantly clear”, that there was “a definite link [between the two lexias]”, and that “there’s no confusion about it”. The lack of modality at the beginning of this extract in combination with his use of the adverb “blatantly”, the grammatical modifier “very”, and his use of negative assertion (“there’s no confusion about it”), suggests that Alfie was certain that the hyperlink was semantically indicating its destination. He thus recognises the function of “new pics” as NN. When asked whether he expected the “new pics” hyperlink to lead to this lexia, Alfie answered that “narratively”, he was “preparing for the worst, hoping for the best”, but that he “feel[s] ... there’s a stalker coming”.

Of the three participants who followed “rain”, Josh and Katie said they had not foreseen the content of the destination lexia (which aligns with its AE designation as schema-disruptive), while Luke felt it was “sort of” expected because the following lexia provided more context (Luke, 118).

Josh thought that clicking on “rain” would give him further information related to the picture the protagonist was tagged in, and thus might be significant to the narrative; retrospectively, he did not anticipate the destination lexia based on its link. He noted that although the new lexia seemed related because it referenced the “soggy Danish”, he could have just as well clicked on “danish”, because that was the only hyperlink on the lexia he had arrived at after having followed “rain” (Josh, 148–150). Katie also explained that she felt the lexia following “rain” was linked to its activating link, because it “relates to the picture, I guess” (Katie, 109–110). By explicitly describing her mental cognition process in hesitant terms (“I guess”), Katie hedges her statement, conveying an element of uncertainty. She also notes “I dunno, maybe something shows that there shouldn’t have been rain, I dunno ... cause there’s sunglasses when it was raining, I thought maybe it was Photoshopped” (Katie, 117–123).

Of those who followed “danish”, Jack says he anticipated only one hyperlink in the destination lexia: “Maybe I expected just the one” (Jack, 200). His expectation, though, is hedged by the epistemic modal adverb “maybe”, suggesting uncertainty. Laura indicates that “she didn’t know what to expect”, and that the destination lexia therefore neither confirmed nor contradicted her expectations (Laura, 159–161). This aligns with our classification of “danish” as an NE link: the readers were not certain what this link would lead to, synthetically and medially confirming the element of exploration, though retrospectively it moved the narrative forward.

In lexia 37, part of the text contains direct speech. Andie accuses “you” of having mistreated her “last summer”, which is denoted as a hyperlink in bold and blue in Figure 3.3. Readers are likely to interpret the past temporal reference of “last summer” as indicative that the hyperlink will lead them to a backstory or a flashback, and thus (correctly) expect it to be an NE link. Furthermore, “last summer” echoes a hyperlink readers encountered several lexias earlier in the story, “Five weeks last summer”; this repetition might therefore give additional weight to the reader’s expectation that “last summer” will lead to a lexia of narrative significance. The second hyperlink in the lexia is the noun “thing”, which is part of Andie’s direct speech. The “you” acknowledges a “thing” with Andie, to which Andie reacts by repeating the word and telling “you” that they can now have their “thing” back. This latter “thing” is hyperlinked. Its positioning in Andie’s direct speech might suggest that it will relate to the “thing” from Andie’s perspective and therefore be NE insofar as it will give the reader information about the “thing”; as the destination lexia does not, however, deliver on this expectation, “thing” is classified as AE.

The participant group was roughly split in their choice of hyperlink in this lexia: out of nineteen, ten chose “last summer”; nine opted for “thing”. Readers who selected “last summer” justified it in terms of a synthetic

response, relating to “attention to the ... larger narrative as artificial construct” (Phelan 2005: 20) and thus the way that a narrative is constructed including the narrative devices that are utilised in a text: either because they wanted “more detail” or “backstory” (5/10), because it had been mentioned in previous lexias (4/10), or because of a combination of these (1/10). Nathan’s explanation illustrates the ways in which participants negotiated their choice of hyperlink “last summer”:

*Nathan:* Okay, so my options are last summer and you can have your thing back.

*Researcher:* Oh yes, thing – yes

*Nathan:* Here’s the thing, last time I clicked last summer, it took me to what I expected and then straight after that it took me to what I didn’t want to happen, I think – I’m worried the same thing will happen here ... But my other option is thing, after she nods at someone behind you, which has to be Tiresias (2) I don’t know, I don’t know, oh (5) I feel like either – I feel like either way I’m gonna end up face to face with Tiresias.

*Researcher:* Yeah

*Nathan:* I feel like thing – clicking thing will make it happen immediately, clicking last summer will give us more backstory, so I’m gonna click last summer again.

(Nathan, 673–684)

Nathan’s response conveys a strong medial reading stance, as he keeps referring to his hypertext “options” and their potential outcomes. For the greater part of this excerpt, he uses “I” self-referentially, thus confirming the ontological distance to the protagonist we noted in the previous section. The only exception is “either way I’m gonna end up face to face with Tiresias”, where doubly deictic “I” marks an automimetic response that implies his perceived double-situatedness. Overall, however, this brief automimetic deviation reconfirms that Nathan has arrived at an ontologically separate concept of self-versus-storyworld.

Nathan explains he is “worried” that the same thing will happen as last time, when he clicked on “Five weeks last summer”, which then took him to “what I expected and then straight after that it took me to what I didn’t want to happen”. Nathan’s explanation also suggests he medially conceptualised the function of the hyperlink “thing” as driving the plot forward, and that because he is hesitant of the expected confrontation between “you” and Tiresias, it is therefore better to click on “last summer”. Interestingly, the hyperlink “thing” is thus conceptualised by Nathan as more of an NE or AN link than an AE link.

This link type classification was shared by several other participants. Alfie, who clicked on “last summer”, also stated that he wanted to “avoid confrontation” (Alfie, 641). Ravi, on the other hand, decided to click on “thing” exactly because of “[Andie’s] actions...[l]ike she knows someone behind [the “you”]” (Ravi, 395–397). Kieran also opted for “thing” because “you get to see what happens to... [the] ‘you’”, which then allows you to “probably work out what happened last summer anyway” (Kieran, 495–500). This again suggests that “thing” is seen by participants as NE rather than AE.

In general, some who chose “thing” did so because they were curious to know what the “thing” was, thematically speaking (3/9). Others, including Ravi and Kieran, felt “thing” was more current or involved action and was therefore more important to the plot, thus signalling a synthetic stance (3/9). Three participants clicked on “thing” because they felt they had already been to “last summer”, having previously clicked on “Five weeks last summer”, whereas “thing” was new and therefore more relevant. One participant, Laura, also added that “last summer” is a whole stretch of time...thing is – it’s one thing” (Laura, 535–537). Interestingly, Laura’s conceptualisation of “thing” also shows that this hyperlink was not necessarily seen as less specific and therefore as an AE link by some participants, but rather as a more immediate, plot-driving action link. All participants who chose “thing” felt the destination lexia related to its link, but only five of nine felt it was expected or “sort of” expected. Nine of the ten participants who picked “last summer” felt the next lexia delivered on expectations, and almost all participants indicated they had at least minimally expected the destination lexia based on its link (9/10). This demonstrates the disruption of the schema particularly in exploration-type links: the researchers classified “thing” as AE based on the writer’s intent and the disassociation between “thing” and its destination lexia, whereas readers expressed more confusion over the link’s function and attempted to fit it within their schema by assigning it retrospective narrative significance.

### **Medially Reading for the Plot**

Our analyses show that readers have varying reasons for opting for different hyperlinks, but they are largely narratively driven. Readers whose responses were predominantly synthetic and medial indicated they followed certain hyperlinks because those seemed most relevant or important, and, having followed them, would almost exclusively see them as related to the activated link. The perceived significance and relatedness of the chosen hyperlinks and subsequent lexias seem at least partly related to narrative navigation and/or exploration for these readers. Participant comments also support this interpretation. Kirsty indicated that she “just



[picked] the [hyperlink] that I think will progress it more” or “would probably make most sense in this plotline” (Kirsty, 57, 130) while Jack chose a link that would “advance...the story” (Jack, 615). Such “reading for the plot” (Brooks 1984), aiming for narrative resolution, is perhaps unsurprising: Brooks defines “plot” as that which makes us “read forward, seeking in the unfolding of the narrative a line of intention and a portent of design that hold the promise of progress toward meaning” (XIII), and argues for the importance of plot for our reading experience, since it is a product of our drive for meaning-making in general. Importantly, our data show that these synthetic needs are expressed through medial responses that reflect the dilemma facing readers when they have to choose between hyperlinks that always potentially compromise their “reading-for-the-plot” strategy.

Of course, not every hypertext fiction is designed so as to afford or encourage “reading for the plot” to the extent that *The Futographer* does. This particular work follows the conventions of the mystery genre, which is geared towards narrative solution and cues readers to find the culprit through a reasoning prompted by narrative cues. Furthermore, the fact that Skains strongly prioritised NN in her linking strategy cued readers towards strategic, problem-oriented navigation rather than poetic or affective effects. Participants were therefore negatively primed towards the potentially disruptive nature and interpretation of hyperlinks. Furthermore, our analysis conveyed a clear tendency for participants to first conflate their identities with the protagonists and to later deconstruct this automimetic stance, having processed significant amounts of contextualising information. This suggests that, even in a multilinear medium that integrates numerous possible story lines and thus “story-times” (“the duration of the purported events of the narrative”, Chatman 1980: 62), reading experiences can show certain similarities in the way they unfold over the reader’s “discourse-time”, i.e., “the time it takes to peruse the discourse” (62) of a fictional work.

## Conclusion

This chapter has proposed and empirically corroborated a new theory of hypertextual reading. By critically examining existing hyperlink typologies, we synthesised them into a new meta-typology that maps onto scalable degrees of schema disruption and writerly play and experimentation. It is the first hyperlink typology that synthesises aesthetic choices writers make between more narrative, plot-driven links (NN and NE) and more affective, exploratory links that foreground schema disruption (AN and AE). Adding a practice-led element to our methodology, author Lyle Skains used the typology as a formal constraint for her Twine fiction, *The Futographer*. While this text was primarily written for a wider digital fiction

audience, we were also able to utilise this hypertext in our hyperlink research. The process thus demonstrates how research-creation can become part of an empirical methodology while simultaneously allowing creative writers to develop their own portfolios.

Our research further sheds methodological light on how reading hyperlinks can be studied empirically. We devised and profiled a new method for obtaining reader responses to individual hyperlinks, through a combination of guided hypertext reading and semi-structured interview. The stop-and-go method applied to prompt reader responses at significant points during the multilinear reading experience demonstrates a systematic and replicable way of tackling the empirical challenges of working with multilinear, digital-born fiction. By devising and successfully implementing a reader response methodology for and empirically testing hyperlink types in hypertext fiction, we have offered original insight into how readers perceive the function of hyperlinks, make predictions, and engage in meaning-making.

Our data support previous research arguing that readers do make inferences in advance of following a link, and retrospectively search for relevance once they reach the destination lexia (Bell 2014; Tosca 2000). We note, however, that – although in a few instances participants indicated they had no expectations – our methodology explicitly asked them about their expectations and might therefore have prompted readers to consider this aspect of the reading more strongly than they would have otherwise. In order to answer our research question regarding how readers parse hyperlinks both before and after following them, we necessarily had to ask what expectations they had; by doing this, however, we by and large precluded the option of not having expectations at all.

Our analyses suggest that readers did recognise different types of links in several instances during the reading session, and that they displayed a tendency to opt for the one that seemed most clear and relevant, leading them to often prefer a NN link over other types. However, readers also conceptualised some links differently than anticipated, particularly by attempting to reconcile schema-disrupting AE links within the narrative schema. This finding bolsters the conclusion that hypertext readers of a narratively driven hypertext like *The Futographer* preferentially choose links that will further the narrative plot, even to the point of making narrative connections between links and their destination lexia that were designed by the writer to have more open, affective connotations.

This “reading for the plot” happens against the backdrop of readers’ strongly perceived, medium-specific double-situatedness, which is cued by the doubly deictic pronoun “you” – as also shown in Chapter 2. Yet again, in this chapter we were able to show that the perceived referential unity between the reader and the protagonist moves from automimetic identity

to a more ontologically distanced stance of “willing role-play”, a concept that, unlike reluctant role-play (Chapter 2), reflects a distinctly affirmative stance towards the protagonist who is seen as a kind of player-character that the player has an emotional stake in. Our findings thus reconfirm the observation made in Chapter 2 that, as more fictional context becomes available throughout the reading experience, readers ultimately deconstruct the automimetic illusion of being in the storyworld and, instead, adopt an overall medial stance that reflects critical awareness of the meta-fictional design of the narrative. That this effect was observable across different hypertext fictions and independent studies shows that, although individual reading experiences and, thus, constructions and mental models of the plot may vary significantly in a nonlinear digital fiction, the reader’s perceived role of who they are vis-à-vis “you” likely shifts away from automimetic perception of self-versus-storyworld.

### **Note**

- 1 Names refer to individual transcripts and numbers to line numbers in those transcripts. Access to the full dataset can be found in the Sheffield Hallam University Research Data Archive, <http://doi.org/10.17032/shu-170007>

# 4 Immersion in Literary Games

## Introduction

The previous chapter considered the ways in which hypertext readers navigate a two-dimensional digital fiction and specifically the strategic choices they make about their experience of the text. This chapter examines the ways that readers experience immersion in digital fiction, including their awareness of how their actions in a 3D space affect that storyworld. It begins by engaging with existing theoretical and empirical research on immersion across digital media, including critiques of the concept. It then offers a new framework for coding immersion in reader-response data, and provides a new systematic approach to analysing immersive features in texts across media by utilising deictic shift theory. While Chapters 2 and 3 have reported on empirical studies in which individual readers were probed by a researcher about their experiences, the study reported in this chapter utilises reading group discourse to show how readers individually and jointly negotiate their responses to a 3D literary game installation, *WALLPAPER* by Andy Campbell and Judi Alston (2015). Throughout the analyses, we show how participants' (auto)mimetic, synthetic, thematic, and medial responses to *WALLPAPER* relate to and are stimulated by immersion. We show that any investigation into immersion in digital media must address the doubly embodied nature of that reading experience. We add three new forms of immersion to existing typologies – literary immersion, aesthetic immersion, and collaborative immersion – to account for the multimodal and interactional nature of digital fiction, as well as for its conceptual status as verbal art. We also show how the environment in which a digital fiction is experienced affects immersion and propose two new concepts – paratextual environmental propping and incidental environmental propping – to account for that. Analysing the way that different forms of immersion work with or against each other, we show that while current theories of immersion imply that immersion is a completely absorbing experience, our data show immersion to be an

intermittent, dynamic, and multidimensional process, stimulated by multiple immersive features which interact – a process we define in terms of a mixing console metaphor.

### **Immersion in Digital Narrative Media**

The concept of “immersion” is well debated, sometimes contested, and defined differently in relation to different media and thus different narrative experiences (see, e.g., Stockwell 2019; Caracciolo 2022: 23–42). Early investigations into immersion and related concepts such as “flow” (Csikszentmihalyi 1990) and “presence” (Lombard & Ditton 1997) tended to emerge from the fields of cognitive psychology and/or computer science as theorists attempted to explain the way that individuals can become so absorbed in experiences that they begin to lose their awareness of their surroundings and/or the mediated nature of the stimulus. Used in this way, the term describes the qualitative affordances of immersive media technologies “that permit users to feel psychologically present within a media message” (Cummings et al. 2021; Slater & Wilbur 1997).

Immersion in digital narrative media has been of rising interest within the Humanities since the 1990s, following the publication of seminal theoretical works such as Murray’s (1997) *Hamlet on the Holodeck*. For Murray, immersion is the “experience of being transported to an elaborately simulated place” evoking “the sensation of being surrounded by a completely other reality, that takes over all of our attention, our whole perceptual apparatus” (98–9). Murray’s conceptualisation of immersion in terms of being transported and completely enveloped by the digitally rendered world is “derived ... from the experience of being submerged in water” (98). Since digital media can be used to create aesthetically rich worlds that can be explored using a mouse or via an avatar, with the reader/player seeing a representation of themselves in that other space, it is perhaps not surprising that immersion is often framed as subjectively perceived relocation to another “simulated place”. The influence of the transportation and submersion metaphors observed both in Murray’s theoretical work and in empirical research in cognitive psychology on print fiction and film (e.g., Gerrig 1993; Green et al. 2008) can be seen in subsequent narratological accounts of immersion in interactive digital narratives. Ryan (2015, 2001) defines immersion as resulting from “fictional recentering” in which “consciousness relocates itself to another world ... and reorganizes the entire universe of being around [it]” (2015: 73). Like Murray, Ryan suggests that reader/players are cognitively relocated to another ontological domain by the “textual information” (74) they process while reading/playing media, and also that they feel completely surrounded by that mediated space when they are immersed.

Investigating immersion across media, Ryan proposes a five-fold typology. Correlating with her definition of immersion as involving a “relocation”, spatiotemporal immersion is originally defined by Ryan as “a sense of being present on the scene of the represented events” (Ryan 2001: 122) and subsequently as the “experience of being transported onto the narrative scene” (2015: 99). When a reader or player is spatiotemporally immersed, therefore, they feel as though they have been transported to and thus their perspective is located within the storyworld. While spatiotemporal immersion emphasises the cognitive shift into another world, other parts of her typology relate to specific narratological devices. Spatial immersion is a “response to setting” (86), temporal immersion is “that which keeps readers turning pages or spectators speculating about what will happen next” (100), and emotional immersion is “subjective reactions to characters and judgements of their behaviour ..., emotions felt for others ..., emotions felt for oneself” (108; see Chapter 6). In these three types of immersion, the transportation and submersion metaphors are absent and instead immersion is seen as engagement with the storyworld’s settings, a desire to read on, and emotional responses to characters, respectively. While spatial, temporal, emotional, and spatiotemporal immersion can be experienced in narratives across media, Ryan’s fifth category of “ludic immersion” is a medium-specific component of interactive digital narratives and is defined as “deep absorption in the performance of a task ... which presupposes a physically active participant” (246). As with the aforementioned concept of “flow”, therefore, in ludic immersion interactivity becomes absorbing. The relation to Murray’s definition of immersion in digital media as something that takes over our attention can be seen here with ludic immersion defined as something that is “deep”, language which also draws on and extends the immersion-as-submersion metaphor. While Ryan defines the five types of immersion separately, she also shows how ludic immersion can work with or against the other types (246–250) and thus assumes that the forms of immersion do not always – if ever – work in isolation.

Ryan’s typology ultimately shows that readers are engaged in processing different elements of a narrative in ways that are sometimes transmedial (e.g., spatial immersion) and sometimes medium specific (e.g., ludic immersion). Extending this medium-conscious, cognitive approach, Thon (2008) “propose[s] to conceptualise the computer game player’s experience of psychological immersion as resulting from a shift of attention to and the construction of situation models of certain parts of the game” (33). Like Ryan, Thon notes the player’s relationship to a mental representation of the story or game, but he adopts the cognitive psychological notion of a situation model as opposed to Ryan’s “world” to account for it. Thon emphasises “attention” as opposed to Ryan’s “transportation” and

“absorption”, but both show that a player’s focus on or awareness of aspects of a game can move from one part of it to another.

Thon proposes four kinds of immersion which largely but not completely map onto Ryan’s categories. For Thon, spatial immersion is a “player’s shift of attention from his or her real environment to the game spaces” (35). His concept correlates with Ryan’s spatiotemporal immersion. Thon’s narrative immersion is

the player’s shift of attention to the unfolding of the story of the game and the characters therein as well as to the construction of a situation model representing not only the various characters and narrative events, but also the fictional game world as a whole.

(37)

Because of its focus on characters, events, and setting, this category largely maps onto Ryan’s three separate categories of emotional, temporal, and spatial immersion. Thon’s ludic immersion is “a shift of the player’s attention to the interaction with the game and ... the possibilities for action within it” (36) and is “mainly experienced through the various kinds of challenges that computer games confront their players with and which form an essential part of the playing experience” (37). The focus on interactivity and challenge shares a focus with Ryan’s conception of ludic immersion as “absorption in the performance of a task” (2015: 246) but Ryan’s category extends beyond digital narrative to what she calls abstract games (such as golf) and nondigital children’s games (such as Cops and Robbers).

Where Thon deviates most significantly from Ryan is in his category of “social immersion”, which he defines as a “a shift of attention to the other players as social actors and the relationship between them” (39). Thon limits this category to multiplayer modes of first-person shooter games and massively multiplayer on-line role-playing games (MMORPGs) and suggests that, in social immersion, “communication and social interaction of the players with each other take place in a rich fictional world” (39). Thon’s definition thus emphasises that players talk to each other through and thus within the game world. However, what Thon does not explain is that social immersion is ultimately generated by communication with other players who are located in the actual world. Indeed, many game settings require physical co-location and, thus, social immersion pervades the world of the game and the actual world of the players. Yet, while Thon’s definition obscures the complex ontological relations that are an integral part of immersion, social immersion implies that immersion can be created and/or enhanced by elements that originate in both the storyworld and the actual world.

Focusing on players' experiences of massively multiplayer on-line games (MMOGs), Calleja (2011) explicitly addresses both the multidimensional nature and the ontological structure of immersion in digital media. However, in addition to clarifying and adding to its definition, he suggests that the term itself should be replaced entirely. From his qualitative analysis of 25 experienced players of two MMOGs, he concludes that the metaphor of "incorporation" should replace "immersion" on the basis that it can more accurately account for the dynamics of game play. Incorporation, he argues,

account[s] for the sense of virtual environment habitation on two, simultaneous levels. On the first level, the virtual environment is incorporated into the player's mind as part of her immediate surroundings, within which she can navigate and interact. Second, the player is incorporated (in the sense of embodiment) in a single, systemically upheld location in the virtual environment at any single point in time.

(169)

Incorporation thus defines the way in which players cognitively process the game as they interact with it in the actual world while also acknowledging that they are embodied within the game world as an avatar.

To explore the way that incorporation is achieved, Calleja (2011) proposes that videogames should be analysed in terms of "involvement" on the basis that "we cannot feel present anywhere without first directing our attention toward and becoming involved with the environment" (34). His "Player Involvement Model" thus provides a means of understanding how players report their experiences of and engagement with games by offering a typology of six forms.

In Calleja's typology, "kinaesthetic involvement relates to all modes of avatar or game piece control in virtual environments" (43) and thus the way that players navigate within the game world. The associated concept of spatial involvement "concerns players' engagement with the spatial qualities of a virtual environment in terms of spatial control, navigation, and exploration" (43). While "spatial involvement" is related to kinaesthetic in so far as both are concerned with exploration of a space, spatial involvement more specifically refers to "giving [players] ... the sense that they are inhabiting a space" (43) and thus pertains to the process of feeling like they belong to the game world. Because Calleja's kinaesthetic and spatial involvement relate to the player's point of view within the game world, they are concerned with the same experiences as Thon's spatial immersion and Ryan's spatiotemporal immersion.

Calleja's "shared involvement" is defined as "players' awareness of and interaction with other agents in a game environment" (43). The focus on



communication with human-controlled agents in the game is evident in Thon's definition of social immersion, but Calleja extends this more explicitly to other animate entities, such as non-player characters, within the game. Calleja's "narrative involvement" is engagement with "the narrative that is scripted into the game and ... that is generated from the ongoing interaction with the game world" (43–44). Like Thon's narrative immersion and Ryan's spatial, temporal, and emotional immersion, it thus relates to the narrative that unfolds through interactive game play as well as narratives generated by, for example, cut scenes. Calleja's "ludic involvement", like Ryan's and Thon's, relates to "players' engagement with the choices made in the game and the repercussions of those choices" (44) and thus to the actions that players take.

Calleja also includes the category of "affective involvement" in his typology to refer to

various forms of emotional engagement ... rang[ing] from the calming sensation of coming across an aesthetically pleasing scene to the adrenaline rush of an on-line competitive first-person-shooter round to the uncanny effect of an eerie episode in an action-horror game.

(44)

Affective involvement represents an inconsistency in his typology because it conflates responses to various types of other involvement. In his definition, the adrenaline rush represents an emotional response to ludic involvement and the uncanny effect of an eerie episode an emotional response to narrative involvement. Thus, while the other categories in his typology relate to specific stimulus from the game, Calleja's affective involvement represents an emotional response to the various other forms of involvement outlined in his typology.

In terms of the involvement model as a whole, Calleja notes that not all games will generate the same type of involvement to the same degree but, like Ryan and Thon, he proposes that involvement is a multidimensional experience. However, the three theorists differ in their assessment of how the different forms of immersion, attention, or involvement work alongside one another. Ryan shows the ways in which ludic immersion interrelates with spatial, temporal, and emotional immersion so as to show the theoretical "compatibility" (2015: 246) of the different types. Thon's theoretical discussion also claims the four kinds of immersion he proposes "tend to converge in the actual playing experience" (Thon 2008: 39), and Calleja shows that "there is a constant blending of dimensions [of the player involvement model]" (45) during game play by analysing examples from his data. However, Ryan, Thon, and Calleja do not offer a comprehensive framework with which to systematically analyse the multidimensional

experiences they describe. Ryan does consider both “the mental operations and textual features responsible for immersion” (Ryan 2015: 85) in her explication of the various types and thus provides an analysis of some of the linguistic and narratological features responsible for some different kinds of immersion, but she does not provide a means of analysing the relationship between the different forms of immersion she proposes.

Moreover, Ryan, Thon, and Calleja do not provide empirical evidence that readers or players of digital narrative media experience immersion in the ways they propose. Calleja does use player accounts of game play. However, his terminological proposal is purely theoretical. Calleja claims that “incorporation” is a better metaphor for a player’s experience of a game on the basis that transportation and absorption metaphors erroneously assume “a unidirectional plunge into a virtual world” (168). He thus suggests that “the metaphor we should use to understand the sensation of inhabiting a virtual environment would best draw upon our knowledge of the experience of inhabiting the everyday world” (168). However, he theoretically prescribes how players should conceptualise their experience rather than examining the way that players do conceptualise that experience. More specifically, Calleja notes that in the context of conceptual metaphor, “Lakoff and Johnson stress in their work [that] meaning results from the interaction that takes place between language and lived experience, each of which modifies the other in a process that is crucially metaphorical” (168). He thus recognises that the metaphorical language that individuals use to talk about the world exists in a reciprocal relationship with their embodied experience of the world. However, while he endorses a methodology that takes embodied cognition as its principal focus, he does not analyse the language that his participants use to describe their experiences of games. Thus, ultimately, he cites no empirical evidence on which to base the use of “incorporation” over immersion.

### **Our Empirical Study on Immersion**

Taking language as the principal focus of analysis, this chapter investigates how readers of a 3D literary game installation conceptualise immersion by analysing reader constructions. It provides a new cognitive framework, developed using deictic shift theory, for analysing the textual features that generate those responses. In the context of empirical research on immersion in narratives, most existing studies focus on print media or film (e.g., Green et al. 2008) and use quantitative methods to measure the extent to which people feel transported to a storyworld and/or absorbed in a narrative (e.g., Green & Brock 2000; Busselle & Bilandzic 2009; Kuijpers et al. 2014). Within the context of digital media, research on immersion is also largely quantitative and/or a stimulus text is developed for the experiment

(see Cairns et al. 2014 for an overview). As an exception, Poels et al. (2007) use a focus group methodology to investigate readers' experiences of immersion in videogames and thus adopt a qualitative approach. However, their protocol asks participants about their experiences of gaming in general as opposed to asking them about a particular text.

In our empirical research, we aimed to investigate how readers of a literary game conceptualise immersion in a naturally occurring text – that is, a text that had not been created or altered purely for the study. Working with reading groups in Sheffield (UK), we use discourse analysis to examine readers' verbal responses to the digital fiction installation *WALLPAPER*, paying particular attention to how participants explicitly and implicitly describe experiences pertaining to different types of immersion.

*WALLPAPER* is a first-person 3D digital fiction, made in Unity software, that tells a story about protagonist P.J. Sanders, an engineer at a software company called Poppitech in the US. Readers pick up the narrative as Sanders returns to his remote family home – Dalton Manor – on the North Yorkshire Moors in the UK following the death of his elderly mother. To find out more about his elusive past, readers adopt Sanders' first-person perspective (as an avatar) and explore the house and its surroundings. The aim of the ludic part of the experience is to find a key to open a parlour that has remained locked since Sanders' childhood. However, the experience is mostly made up of spatial exploration of the storyworld and readers come across various visual and textual objects in the house (e.g., postcards, letters, notes, floating circles of text), which reveal information about Sanders and his family's past. *WALLPAPER*'s use of ludic mechanics alongside foregrounded and creatively implemented verbal-literary features mean it can be defined as a “literary game” (Ensslin 2014). This interplay can also be seen in the way in which readers are encouraged to re-play the piece. At the end of their playthrough, they are given a percentage score which indicates how much of the storyworld they have discovered, thus implicitly encouraging them to return to *WALLPAPER* to discover more.

Readers who find the key to the parlour deploy a “Visual Memory Extractor” that Sanders has been working on for Poppitech and which projects a film onto the walls of the room. The film reveals that Sanders had a twin sister who died when a small child and his mother's sadness is thus explained by the grief that she felt but had always hidden. At this point the narrative relevance of the metaphoric title – *WALLPAPER* – is fully realised. Like layers of a physical wallpaper, family memories are peeled back in the house until the original layer of the story is discovered. The title thus evokes concepts of dishonesty wrapped by projections of domestic cleanliness and integrity, but it also suggests palimpsestic readings of layered multimodal projections of voices of the past, of the here and beyond.

*WALLPAPER* can be played on a desktop computer, but it was originally launched as an installation at Bank Street Arts in Sheffield, England, in November 2015. The work was projected onto a large screen inside a dark, enclosed purpose-built room within the gallery and the reader used a mouse and keyboard to navigate the storyworld. Depending on the number of visitors in the gallery, readers might be joined in the room by others. However, the interface allowed only one person to operate the computer and navigate the first-person perspective of Sanders.

### *The Protocol*

Fourteen participants from four reading groups in Sheffield, England (aged between 20 and late fifties) took part in the reader-response study in November 2015. Following Peplow et al. (2015) we regard reading groups as “providing insights into readers’ activity” (3), while also acknowledging that “participants’ reports cannot be regarded as direct reflections of their mental process as they read” (Whiteley 2011: 33). We thus analyse language use that we demonstrate reflects immersive experiences, while also recognising the inevitable constraint of any empirical study that seeks to investigate cognitive processing.

Three of the groups (A, B, C) were established reading groups who had been meeting since 2011, 2008, and 2014 respectively and one was a “pop-up” reading group (PopUp) that was set up as a public engagement event to run alongside the *WALLPAPER* exhibition. Adopting the purposeful sampling approach outlined in Chapter 1, the established reading groups were approached on the basis that they had an interest in reading non-print (including film) and/or experimental texts. All the participants in the study read fiction in print at least once a month, with ten of them doing so more than once a week. All the participants in the study had advanced or intermediate computer skills and were very confident with the Internet because they had more than seven years of experience using it. Eight out of the 14 played computer games regularly.

In terms of our protocol, we asked all participants to experience *WALLPAPER* at the gallery individually and subsequently meet with the other members of their group to discuss it. The participants had varying levels of experience with videogaming and with digital reading. However, because *WALLPAPER* combines gameplay and reading, participants did not necessarily need to have such experience and none of the participants had read much, if any, digital fiction before. While this was a new experience for most of the participants, they all self-selected to take part in the study, which suggests an interest in digital narrative media. We aimed to maximise the “naturalistic” (Swann & Allington 2009) nature of the study by allowing “readers to interact freely” (Peplow et al. 2015: 6) and thus

offering “greater ecological validity” (Peplow et al. 2015: 6). However, because we aimed to “generat[e] hypotheses based on informants’ insights” (Flick 2018: 262), we also introduced a level of experimental intervention in the form of a researcher being present at each group to intermittently guide the discussion according to a semi-structured protocol. Participants were told that the researchers were interested in the concept of immersion in *WALLPAPER* but that they could also talk about whatever interested them about the experience. The researcher had a set of topics and associated questions for discussion, but adopting a semi-structured approach meant that the researcher was also “free to allow for unplanned talk” (van Peer et al. 2012: 82) and thus the conversation could expand beyond our initial research interests.

To minimise the influence that the presence of the researcher might have had over participants’ behaviour and talk, the researcher met with the reading groups before the data collection to get to know the participants. Despite deploying this method, as the Hawthorne effect suggests, inevitably the readers would have been influenced by the presence of the researcher at the discussion group. We thus define our approach as “semi-naturalistic”; it allowed us to collect data on a specific topic and allow for free-flow talk, while bearing in mind the limitations of a researcher-led session which aimed to keep the discussion centred on *WALLPAPER* as opposed to social topics that typically infiltrate book club discussions (see Peplow [2016] on the social dynamics of reading groups).

### *Analytical Frameworks*

All sessions were audio recorded, transcribed, and subsequently coded using NVivo. In the coding, we identified evidence of the types of immersion defined in Ryan’s, Thon’s, and Calleja’s typologies. To systematise the coding themes, we harmonised categories where the definitions corresponded, deferring primarily to Ryan’s definitions, which represent comprehensive narratological categories, and utilising Thon’s and Calleja’s additional immersion and involvement types for videogames that are not addressed by Ryan. We have retained the term “immersion” over Calleja’s “incorporation” because “immersion” is dominant in narratological accounts and is often used within lay discussions of narrative experiences. We thus find no compelling evidence to change the term. The data were coded according to the categories shown in Table 4.1.

When analysing the data for reader constructions of immersion, we paid attention to both explicit language use about immersive experiences, and implicit linguistic cues in reader responses that indicate a perceived relationship to elements of the storyworld and thus evidence of an immersive experience. With regard to the former, this involved looking for instances

*Table 4.1* Categories used in coding the *WALLPAPER* study data

<i>Immersion type</i>	<i>Definition</i>	<i>Corresponds with</i>
Spatiotemporal	“A sense of being present on the scene of the represented events” (Ryan 2001: 122). “Th[e] experience of being transported onto the narrative scene” (Ryan 2015: 99).	Thon’s spatial immersion; Calleja’s kinaesthetic and spatial involvement
Spatial	“Response to setting” (Ryan 2015: 86)	Thon’s narrative immersion; Calleja’s narrative involvement and “affective involvement”
Temporal	“That which keeps readers turning pages or spectators speculating about what will happen next” (Ryan 2015: 100)	
Emotional	“Subjective reactions to characters and judgements of their behaviour ..., emotions felt for others ..., emotions felt for oneself” (Ryan 2015: 108)	
Ludic	“Deep absorption in the performance of a task ... which presupposes a physically active participant” (Ryan 2015: 246)	Thon’s and “ludic immersion” and Calleja’s “ludic involvement”
Social immersion	“A shift of attention to the other players as social actors and the relationship between them” (Thon 2008: 39)	Calleja’s “shared involvement”

in the data where readers explicitly used terms like “immersion” and, with the latter, more implicit language use such as metaphorical language that suggests readers experienced immersion.

Central to our analytical approach to both reader constructions and textual features is deixis. As Macrae (2019) explains, “‘deixis’ is the name given to a set of words which are used to ‘point to’ something or someone from a particular perspective” (22). Thus, examining deictic language can reveal the perspective or position from which the speaker is speaking. We propose that within the context of reader constructions, an examination of deixis can reveal participants’ position in relation to the storyworld. The analysis of deixis as a textual feature within the stimulus text – in this case *WALLPAPER* – can also show how the text attempts to position the reader in relation to the storyworld.

Offering a systematic way of analysing deixis, we utilise deictic shift theory (Duchan et al. 1995, henceforth DST) and expand Stockwell’s

(2020) cognitive deictic framework for its application to digital media. The basic premise of DST is that a reader's deictic centre (or *origo* – the 'I'/'here'/'now') is shifted into a storyworld when they read a text so that they then process all language relative to that shifted deictic centre. Irrespective of where the text's deictic centre – or *origo* – begins at the start of a narrative, DST proposes that it shifts as the narrative progresses. A deictic “push” is a shift further into the storyworld (or onto a further embedded narrative), and a deictic “pop” is a move in the opposite direction, shifting the deictic centre back from within the storyworld to the actual world of the reader, for example.

A number of theorists note the relevance of DST for analysing immersion, particularly in terms of conceptualising perspective taking and/or projection into storyworlds (e.g., Herman 2002: 14–15, 271–4; Busselle & Bilandzic 2009: 323), but they do not offer a comprehensive framework with which to do this. Ryan's (2015) analysis of spatiotemporal immersion notes the significance of deixis including spatial and temporal adverbs as well as verb tenses, which implies that DST might be a suitable framework for the systematic analysis of Ryan's categories of immersion.

Within cognitive poetics, Stockwell (2020) develops DST as an approach to print literature by providing a framework for analysing deictic categories and associated linguistic cues that are responsible for deictic shifts into, within, and out of a storyworld. These comprise:

- *perceptual deixis* – expressions concerning the perceptive participants, or characters, in the text;
- *spatial deixis* – expressions locating the deictic centre in a place or setting;
- *temporal deixis* – expressions locating the deictic centre in time;
- *social deixis* – expressions that encode the social viewpoint and relative situations of authors, narrators, characters, and readers in relation to one another;
- *textual deixis* – expressions that foreground the textuality of the text such as chapter title or claims to authenticity;
- *compositional deixis* – aspects of the text that manifest the generic type of literary conventions available to a reader with appropriate literary competence such as maps in adventure and fantasy novels (Stockwell 2020: 54).

Since Stockwell's approach is developed to analyse linguistic features in print texts, it requires development for it to be used in the analysis of digital fiction. In the analysis below, we show that deictic shifts in digital fiction can be initiated not only by linguistic features, but also by visual, aural, and interactive elements. We thus develop a medium-specific,

cognitive deictic framework to account for multimodal features in digital media. In addition, within stylistics and narratology deixis is usually analysed as a textual feature that is theoretically likely to have a particular effect on readers (e.g., McIntyre 2006, Macrae 2019). However, since deixis is used in natural language to express perceived relationships between a speaker and other entities or people (Jarvella & Klein 1982), we also analyse deictic language in the participants' reader construction data to examine the speakers' perceived relationship to the storyworld and its components.

## Analysis

### *Spatiotemporal Immersion, Paratextual Environmental Propping, and Double-Situatedness*

When asked directly by the researcher whether they felt immersed in the experience, some participants talked explicitly about the features that drew them into the storyworld. Louise, for example, remarks that "I think the fact it's set at night, it's dark within the scene ... and it's also dark where you are, does kind of make you feel more of a part of it" (B, 427).<sup>1</sup> Engaging in a synthetic reading in which she comments on the way that the narrative is constructed and the visual nature of the installation, Louise notes that the darkness of the room combined with the darkness of *WALLPAPER* visually united the two spaces, as though one was extending into the other. She draws on metaphors of transportation and containment to signal spatiotemporal immersion by implying that "it" is a separate space which "you" can "feel part of" via the shared darkness of the two spaces.

Previous research has emphasised the potentially immersive effects of playing videogames in darkened rooms, especially for horror games (e.g., Ilgner et al. 2013). Within the context of reading print literature, Kuzmičová (2016) argues that the environment in which a book is read can affect the extent to which readers become absorbed in a narrative. Proposing the term "environmental propping", she suggests that "distinct text effects in the reader's consciousness are reinforced precisely by the reader's peripheral experience of the environment" (296) and that "thanks to this [environmental] propping, a sense of narrative presence arises more easily" (296).

Kuzmičová's theory of environmental propping suggests that the various environments in which a reader can choose to read a book can affect the nature of their engagement with narrative. Readers of *WALLPAPER*, however, had to experience the narrative within a particular location. Moreover, the purpose-built room in which *WALLPAPER* was located was specifically designed to encourage immersion before readers entered it.



It was covered in brickwork to match the brickwork of Sanders' family home with blue and pink lighting giving the exterior an ethereal feel which primed readers to anticipate a supernatural-style narrative. Inside the installation, readers sat on a bench in a small, dark room with a keyboard and mouse in front of them. This was also designed to encourage immersion by creating a self-contained, intimate space with ambient lighting that matched the dark aesthetic of *WALLPAPER*. A further means of encouraging the reader to feel part of the storyworld was a high-resolution projection of *WALLPAPER* projected onto a large screen with surround sound speakers playing the audio, thus giving the experience a cinematic feel. These features, Louise observes, helped her to feel as though she was present within the storyworld. The material, physical environment that surrounded the *WALLPAPER* narrative itself was thus instrumental in encouraging immersion.

To capture the way in which the physicality of a reading or playing environment, such as a digital fiction installation, can be designed to scaffold and encourage immersion, we propose the concept of "paratextual environmental propping". The concept draws on Genette's (1997) concept of the "paratext", which he uses to describe the external elements that frame a text, including the title, the book cover, and blurb. The paratext, which Genette defines as a "zone between text and off-text" (2), is not part of the narrative fiction itself but influences the reader's impression of a text, priming them in terms of what to expect and how to read it. Paratextual environmental propping, as we define it, thus refers to the way in which pre-planned environmental elements (such as elements in a gallery installation) are deliberately implemented to prime the reader to expect a particular narrative experience in order to encourage immersion in the narrative. Paratextual environmental propping in *WALLPAPER* included the bricks on the exterior, and the lighting both outside and inside the installation which matched the aesthetic of the literary game. Like Kuzmičová's concept of environmental propping, paratextual environmental propping could also potentially include ambient sounds and smells but, in the former case, these are not designed into the experience by the author. In paratextual environmental propping, on the other hand, the propping is premeditated as part of the overall experience. Louise's response to the darkness of the installation provides empirical evidence of its effect on readers.

While Louise notes the immersive potential of the paratextual environmental propping, other participants correlate immersion with a mimetic response in which they evaluated the digital storyworld's viability. Mark notes that "once I was inside the house, that was immersive, because I was just going room by room, sequentially, like an actual human being would" (C, 1726–7). Other participants did not comment on individual features, but noted a general sense of being absorbed in the experience:

*Abi:* There was enough there that made me stay rather than cut it short

*Researcher:* Right, so you were //immersed?

*Abi:* //Yeah, yeah, didn't think, oh I must get back to work, and all that, so yeah, so yeah

(A, 664–8)

Abi recounts wanting to stay in the *WALLPAPER* installation as evidence of immersion. However, she also suggests being immersed meant that she did not think about her immediate responsibilities – i.e., being at work – and thus that *WALLPAPER* was sufficiently distracting from the actual world to constitute immersion for her.

Other participants did not talk explicitly about being immersed in *WALLPAPER*, but their pronoun use implicitly demonstrates “a sense of being present on the scene of the represented events” (Ryan 2001: 122) and thus of being spatiotemporally immersed at least some of the time. As also seen in Chapters 2 and 3, participants frequently use the first-person “I” and sometimes the second-person “you” when talking about their experiences, with both forms of pronominal reference suggesting that readers feel simultaneously positioned inside and outside *WALLPAPER*'s storyworld at the same time. Examples include: “Someone was talking to you ... when you kept flicking the light switch” (Eleanor, A, 508) and “I did wander round – round the garden and ... think I should go in the house now” (Will, C, 1047). In both examples, the participants mention the interactive tasks they undertook in the storyworld – i.e., flicking a light switch and wandering around a garden – which suggests that they are recounting an experience from the storyworld. However, because the readers are ultimately responsible for controlling the avatar, the pronouns also refer to themselves in the actual world.

Using DST, we suggest that, in addition to the materiality of the installation encouraging immersion, spatiotemporal immersion is triggered as soon as readers begin *WALLPAPER* and further reinforced by ludic and temporal immersion and thus associated explicitly with interactive and narrative elements. The text begins with a black screen and an American female voiceover as follows: “Dear Mr. Sanders, I am very sorry to hear about the loss of your mother. I appreciate that it is a difficult time and you will need to travel to the UK to settle matters on your family estate.” As a purely verbal opening to the text, the relational deictic honorific “Mr. Sanders” establishes “the social viewpoint and relative situations of” (Stockwell 2020: 54) the female speaker and Sanders as formal, with high-register lexis (e.g., “appreciate”, “settle matters”) and grammatical constructions (e.g., lack of contractions; complex sentences) further confirming a formal relationship between them. At this point in the voiceover, a visual

representation of the storyworld appears. It is night and we see a Georgian house in a rural setting with a modern car parked in the drive (see Figure 4.1). As the voiceover continues, we learn that this letter is from Jane Richardson-Smith, Director of Human Resources at Poppitech, and that Sanders is behind on the development of a prototype.

In terms of temporal deixis, the letter is written in the present tense, but readers experience it – as Sanders would – at a point after it was written. There is thus a temporal deictic pop from the past and a document written in the present tense, to the present in which the letter is an artefact from the past. The use of the second-person address (e.g., “you will need to travel”), which is used throughout the letter, works doubly deictically (Herman 2002) to push the reader into a perceptual deictic position that is aligned and thus shared with Sanders. The consistent use of the definite article also assumes shared knowledge. Perceptually, therefore, as an introduction to the storyworld the letter establishes the first push of the reader into Sanders’ point of view.

Halfway through the voiceover, the reader can begin to control the first-person avatar by using the mouse and keyboard and thus physically explore the storyworld. In terms of interactivity, *WALLPAPER* uses what Thon (2009) calls a “subjective point of view” in which the reader experiences the storyworld from both “the spatial and perceptual perspective of the player’s avatar” (282) and also a “subjective point of action” in which “the action position of the player coincides with that of the player’s avatar” (290), so that the reader controls the actions of the avatar directly. A subjective point of view and point of action both work as pushes because they unite the player and the avatar. The player can influence their view of the storyworld by moving the mouse in the actual world, but they have a



Figure 4.1 Screenshot of the opening scene of *WALLPAPER*

subjective point of view and point of action in the storyworld. They are thus inside the storyworld as a player-character and outside the storyworld, in the actual world, as a player. In *WALLPAPER*, as soon as the reader begins to control the avatar, their interactive role causes a perceptual and temporal push from Jane Richardson-Smith and Sanders' correspondence to Sanders' point of view in the present storyworld. The combination of linguistic cues and reader agency thus further contextually anchors the reader in the storyworld while they remain corporeally in the actual world.

Returning to the participant data, both Eleanor and Will assume the first-person perspective initially offered to them by the letter and enforced throughout *WALLPAPER* by the subjective point of view and action they experience when controlling the avatar. However, they also report this experience as flesh-and-blood readers. Eleanor's use of the "you" above ("Someone was talking to you...") is therefore triply deictic: it is used to refer to the avatar in the storyworld, Eleanor in the actual world, and a "generalized" (Herman 2002: 340) collective audience that suggest a shared experience between the players, all at the same time (see Chapter 3). As seen in the reader data in Chapter 2, Will, like other participants in the *WALLPAPER* data, uses "I" to refer to himself in the actual world and to the avatar (Sanders) he is controlling in the storyworld at the same time. We thus also see evidence of doubly deictic "I" in his responses.

From a theoretical perspective, the multideictic forms of pronominal reference, which participants use throughout their discussions, provide some qualitative evidence of spatiotemporal immersion with the associated phenomenological effect of feeling partially or intermittently "transported" (Gerrig 1993; cf. Green & Brock 2000) into the storyworld. However, this hybridised form of pronominal reference also empirically justifies the importance of accounting for both the storyworld and actual world in accounts of immersion across digital media. As shown above, Calleja (2011) suggests that players of videogames inhabit, or "incorporate", two simultaneous levels: the mental space holding a representation of the virtual environment, and the represented space embodying the player-as-avatar in the game world (169). As we have shown in Chapter 2, within the context of digital fiction specifically, Ensslin (2009) alternatively proposes the concept of "double-situatedness" in which readers are "embodied" as direct receivers, whose bodies interact with the hardware and software of a computer [and] ... 're-embodied' through feedback which they experience in represented form" (158). In drawing on the notions of both situatedness and embodiment, double-situatedness thus accounts for the way in which readers are simultaneously positioned inside and outside a digital storyworld ontologically while cognitively processing the storyworld from the actual world. We thus adopt double-situatedness over

incorporation because it more explicitly accounts for the separation of as well as the relation between the two spaces. It also emphasises the fact that re-embodiment emerges from and in the reader-as-interactor rather than assuming the text is an independent agent.

*Ludic Immersion as Convergent and Divergent*

As the preceding analysis shows, participants experience spatiotemporal immersion because they have been pushed perceptually and temporally into the scene via the textual features of the letter from Jane Richardson-Smith but also because their interactive role further unites them with Sanders. Within the data, participants frequently talk about their interactive role within *WALLPAPER* as either focusing on or diverting their attention to elements within the storyworld. Oscar, for, example explains:

I got ... involved with what was going on on the screen and ... the setting itself, exploring this house, I put myself into the mind-set of who I was, ... looking at all the things, seeing what I could pick up. ... It did get to a point where ... I sort of situated myself as that first-person view. Rather than playing the game ... it sort of became like an automatic extension.

(PopUp: 187–93)

By focusing on the materiality of the experience, Oscar displays a medial and automimetic response to *WALLPAPER* in which he evaluates his role in relation to the medium-specific affordances of the game with the various elements ultimately resulting in deictic pushes into a first-person position. In articulating his actions within and relationship to *WALLPAPER*, however, Oscar moves from talking about being outside the text (e.g., referring to “the screen”) to implicitly being inside the storyworld (e.g., “exploring the house”) to explicitly deciding to become the avatar (e.g., “I ... situated myself as that first-person view”). He also states that the avatar “became an automatic extension” of himself as opposed to a role that he played. For Oscar, the spatial immersion (“the setting itself”), emotional immersion (“put myself into the mind-set of who I was”), and ludic immersion as “deep absorption in the performance of a task” (Ryan 2015: 246) including “looking at all the things, seeing what I could pick up”, converged.

Others noted that the various roles afforded to them sometimes clashed but that they also ultimately remained immersed. Recalling his exploration of the house, Tom notes, “trotting up and down the same rooms over and over again, and I got completely like target-fixated on finding the key, and there were various words in the background and thoughts – I had no interest in them at all” (B, 31–33). In this example, Tom displays evidence of

what Hayles (2007) defines as “hyperattention”, a cognitive state commonly induced by videogames which is “characterized by switching focus rapidly between different tasks, preferring multiple information streams, seeking a high level of stimulation, and having a low tolerance for boredom” (187). Tom describes the focus of his attention as being the fulfilment of a task or goal and specifically finding the key to the parlour. He is aware that there were textual elements in the storyworld that they could explore – i.e., “words in the background”. However, he distinguishes between the ludic and textual elements by recalling that he was “target-fixated” on the former and “had no interest” in the latter. In this synthetic and medial response, we therefore see evidence of sustained ludic immersion and a divergence from or suspension of “deep attention” which is “characterized by concentrating on a single object for long periods ..., ignoring outside stimuli while so engaged, preferring a single information stream, and having a high tolerance for long focus times” (Hayles 2007: 187). As suggested by previous research on combining narrative reading and interactive gameplay, the latter can distract readers from following the story (Takacs et al. 2015). Tom likewise reports paying no attention to the verbal elements that may contribute to the symbolic enrichment of the storyworld. However, while ludic immersion is the most dominant form of immersion being recounted by Tom, spatiotemporal immersion is still retained; the doubly deictic “I” signals movement through space and time as though the reader is doubly situated.

While Tom’s response shows how interactivity can contribute to immersion, it can also cause pops rather than pushes into the storyworld. Participants sometimes reported feeling frustrated with particular forms of interactivity if they were not aware of the rules governing it or if the rules did not seem to make sense to them. As Eleanor remarks, “well I went round the house before I discovered I had to get the damn briefcase out of the ... well, I couldn’t work out how to open the boot and get the briefcase” (A, 166–8). Eleanor reports not being able to get into the house because the game had told her, via onscreen text, that she had not collected the briefcase. Thus, while interactivity can act to unite the reader with the avatar and thus spatiotemporally push them into the storyworld, it can also frustrate readers, causing immersion to be potentially lost. Eleanor’s response shows irritation with the rules governing the game. The onscreen text reminds her that she occupies a position outside the storyworld – as a player, rather than character – from which she can enact commands. Textual deictic features which “foreground[s] the textuality of the text” (Stockwell 2020: 54) are thus responsible for a pop in this case but perhaps only because it was noticed by Eleanor at a point after it was useful to her. Conversely, because onscreen instructions are a common feature in videogames, it is likely that they do not always interrupt immersion. Rather,

short instructions such as “open the boot” are meant to be conducive to uninterrupted game play and, as a conventionalised feature of videogames, may enhance rather than interrupt immersion.

### *The Role of Sound and Incidental Environmental Propping*

While the analysis so far has focused on the way that interactivity affects immersion, the narratological features of *WALLPAPER* as a literary game are also central to the experience. Emotional immersion and temporal immersion are particularly relevant because they relate to feelings towards the player-character and/or other characters in the storyworld as well as temporally oriented curiosity and suspense felt by readers in relation to the (pending) events of the storyworld.

In addition to establishing information about Sanders, Richardson-Smith’s opening letter is important for positioning the reader’s psychological perspective within the storyworld and thus the first step towards emotional immersion, the “subjective reactions to characters” (Ryan 2015: 108) and “emotions felt not for oneself but for others” (108). Further details about Sanders’ situation are revealed once readers begin to explore the deserted family home. The direct thoughts of Sanders are intermittently displayed via onscreen text, providing access to Sanders’ internal perspective and memories. If the reader picks up one of the prayer cards on Sanders’ mother’s dressing table, for example, Sanders reflects: “I was only four years old Dad. Why did you leave us?” Handwritten letters from Sanders’ mother, Mary, to Sanders’ father can also be read, explaining how lonely she felt while he was away (e.g., “the days without anyone seem endless”), with one letter revealing the pain Mary feels in response to a recent miscarriage. Such intimate keepsakes utilise perceptual deixis to show the subjective stance of the characters (e.g., “seem endless”, “I was only”) and social deixis to encode the relative situations of the characters (“Dad”) to illustrate the mental states of the characters and the relationships between them.

Several participants explicitly talked about the “resonant” affect they felt for Sanders, specifically in relation to going back to a family home to uncover details about the past:

I was having a conversation with my mother recently where ... she was telling us ... about her experiences of her older relatives, her aunts, and uncles, so I know these people are connected to me, but I don’t really know them and I don’t really have ... any first-hand knowledge of the things that they’ve done, so they’re unknown and yet they’re connected to me ... and this conversation with my mother was kind of uncovering some of that, ... I think the same thing was happening with PJ ... in his

exploration around the house, ... these people who are connected to him, but are unknown, he was making things known about them and ... it was ... enriching his own understanding of himself and his family ..., so there was a resonance there for me anyway with PJ.

(Brendan, A, 611–22)

Brendan's mimetic and automimetic response to *WALLPAPER* shows his interest in Sanders' exploration of family history. Sanders is seen as a realistic character but he also draws connections to his own experience. He comments retrospectively on the narrative, ontologically detaching himself from the character of Sanders by referring to him with his name as opposed to using the pronouns seen in previous examples. The use of the past tense "was" to refer to the resonance he felt suggests that the emotional immersion was experienced during gameplay as opposed to something that lingered afterwards. However, he uses the adjective "connected" three times to conceptualise the comparable ongoing effect that locations, objects, and stories from the past have on Sanders and himself. Thus, while spatiotemporal immersion is not signalled at this point, emotional immersion is evident in his (auto)mimetic reading.

In terms of explicit comments about the narrative structure, some participants commented on the way that *WALLPAPER* generated suspense. A sense of narrative tension was characterised as being associated with a particular genre (e.g., "There was a mystery that you had to solve" [Abi, A, 543]), personal curiosity (e.g., "definitely wanted to find out more as it was going along" [Celia, C, 1407]) and threat (e.g., "There was a sense of menace throughout ... something could pop out at any moment" [Tom, B, 1249–50]). In these examples, the participants' synthetic responses evidence narrative immersion as they reflect on the way that they wanted to keep reading to find out what happened next and/or were expecting something significant to happen. In this regard, some participants commented on the audio's ability to influence the narrative mood:

*Abi:* ... and the music built – you know, it was just really //decent

*Brendan:* //spooky

*Abi:* Yeah

*Ivor:* Spooky

*Abi:* //Yeah, yeah

*Ivor:* //Atmospheric

(A, 282–7)

*WALLPAPER* uses sound throughout. At the beginning and as the narrative tensions are being resolved at the end, low-frequency bass with intermittent escalating high-pitched strings creates an ominous atmosphere.



In the extract above, the participants collaboratively construct an impression of the atmospheric effects that the sound had on them. Responding to this non-diegetic sound, which is “represented as being outside the space of the narrative” (Stam et al. 1992: 62), they agree that the music is appropriate (e.g., “decent”) for creating a “spooky” atmosphere, contributing to the participants’ temporal and spatial immersion by creating a foreboding sense of the landscape they find themselves in (i.e., a house with supernatural elements). In terms of deictic positioning, the background music pushes these readers into the storyworld by creating a sinister and suspenseful mood in combination with the visual darkness of the setting, contributing to their immersion.

While some of our data show that in-game sound effects can contribute to immersion in games (cf. Nacke et al. 2010), some readers also noted the anti-immersive effect that the sound had. Some diegetic sounds in *WALLPAPER* occur without the input of the player and are defined by Collins (2013) as “kinesonic incongruent” (35), because they “fail to map to the action or gesture of the player” (36). In *WALLPAPER*, a kinesonic incongruent sound occurs when Sanders coughs or breathes heavily because these effects happen without the reader’s input. Some participants in our study perceived some kinesonically incongruent sound effects as counter-intuitive. Oscar, for example, notes:

I think at a certain point to be honest the breathing sort of broke immersion because ... breathing is such an intimate sound. ... If you – if this – if Sanders is essentially trying to be an avatar for the player, if I’m not breathing like that then it just seems a bit odd.

(PopUp, 368–72)

In Oscar’s medial and automimetic response, there is both an explicit and implicit ontological detachment from the avatar in which he focuses on the way that medium-specific features inhibit him from identifying with the character. He explicitly talks about immersion being “broke[n]” because he feels as though the diegetic sounds are too “intimate” for them to be an embodied part of himself. In terms of implicit markers, in the second sentence he moves from using generalised “you” to the proximal demonstrative “this” to the proper noun “Sanders”, signalling an attempt to identify a form of reference which accurately reflects his deictic relationship with the avatar. The first-person pronoun in the extract is not used doubly deictically but used instead to refer to himself in the actual world only. We thus see a shift away from the protagonist as possible deictic centre – a pop – which is caused by kinesonically incongruent diegetic sounds. Immersion is lost because these sounds separate the reader from the avatar by reminding them that the character exists and – in this case – acts independently of

them. This response from Oscar is particularly significant because it suggests a departure from Oscar's sense, shown in the extract above, that the game "sort of became like an automatic extension". The incongruent sound was thus sufficiently distracting for it to cause a significant deictic pop.

The site-specific nature of the *WALLPAPER* installation also influenced the participants' interpretation of sound and their deictic position relative to the storyworld. Several participants commented on noises in the gallery that were not part of *WALLPAPER* but which affected their experience. Brendan, for example, notes: "I heard things on the ceiling and I thought it was in-game sound effects, that there were spooky things going on upstairs" (A, 493–4). In his medial response, which shows awareness of the materiality of the installation, Brendan refers to ambient noise that was not part of the text, but which was brought in as part of a diegetic soundscape by his attention scope. Here, the sounds deictically push the reader further into the storyworld by expanding its ontological boundaries to include the noises heard overhead.

Earlier in this chapter, we showed how paratextual environmental propping and specifically the installation's physical design could contribute to immersion. In Brendan's response in the preceding paragraph, however, the sounds were not pre-scripted but rather incidental. The sounds that he heard and incorporated into the *WALLPAPER* narrative thus constitute what we call "incidental environmental propping" as opposed to paratextual. Calleja (2011) notes that the environment in which a game is played can affect the player's interpretation of audio, suggesting that "the player can integrate [input arising from outside the game environment] into their game experience" (172). Examples from our data empirically substantiate Calleja's proposals. However, it is important to note that the incidental environmental propping is incorporated into the experience when the reader is already immersed spatiotemporally as well as narratively or ludically. That is, the incidental environmental propping does not cause immersion in isolation but rather works with the other modes to reinforce it. We would maintain therefore that the extratextual sounds, and by extension other environmental sensory inputs, can contribute to and sustain feelings of anticipation associated with the suspenseful narrative. Ultimately, though, they contribute to but are not solely responsible for spatiotemporal, emotional, and/or temporal immersion within the storyworld.

### *Literary and Aesthetic Immersion*

As a literary game, *WALLPAPER* combines ludic and literary qualities. While the previous sections have shown evidence of narrative and ludic immersion in our data, these categories do not account for the kind of deep

attention (Hayles 2007) that many participants reported experiencing when they encountered textual objects in the 3D environment of *WALL-PAPER*. In the following excerpt, Tom's discourse offers some evidence of the phenomenological difference between hyper- and deep attention, which can be experienced as mutually exclusive or impeding:

- Tom:* Yeah, I think ... the effort to drive and engage – yeah, was a bit too much .... 'cause yeah, I can't drive and think at the same time.
- ...
- Researcher:* There – //there is an extra level, yeah – yeah that's really hard, yeah
- Tom:* //Most of those levels – especially, that felt like a completely different part of my brain entirely to when I'm reading fiction, it felt like a completely different thing
- Louise:* Mm, yeah
- Tom:* ... like cooking as opposed to playing football, cooking is a different thing, so yeah
- ...
- Louise:* Yeah
- Tom:* So not like two different sports, but two different endeavours entirely
- Louise:* More of a barrier to enjoying it than actually helping you to
- Tom:* I think so, or if I was gonna drive I would have to go into a completely different mind-set, like how fast can I get round this
- Louise:* Yeah
- Tom:* Can I beat last time? ... Which is what video games tend to be a bit like, I think

(B, 711–45)

Tom describes his ludic mind-set in terms of ambition regarding speed (“how fast can I get round this”) and self-competition (“Can I beat last time?”), which are processed and executed in “a completely different mind-set”, compared to “reading fiction”. Significantly, Tom refers to a cognitive clash between “different part[s] of [his] brain” as a dichotomy between “driv[ing]” on the one hand and “engag[ing]” and “think[ing]” on the other, which he considers comparable to the experiential difference between “cooking” and “playing football”. As Louise's comment (“More of a barrier to enjoying it...”) seems to suggest, the competitive, action- and speed-centred cognitive mechanisms associated with his ludic immersion are qualitatively counter-intuitive and prohibitive vis-à-vis the kind of

deep attention that Hayles (2007) attributes to contemplative reading, listening, and/or viewing activities. “Literary immersion” differs from narrative immersion in that literary immersion requires a deep, figurative and/or symbolical close reading of aesthetically foregrounded text (oral or written) in order to decipher its encoded meanings, whereas narrative immersion, as comprising emotional, spatial, and temporal immersion, is focused on story development and does not necessarily lead to close reading – though, as we will show, these forms of immersion can work together.

Indeed, when literary immersion works in combination with other forms of immersion, thematic responses are often produced as readers attempt to decipher what ideas or concepts are being explored. In the following exchange, Eleanor and Abi discuss two kinds of literary objects:

- Eleanor:* I mean the letters gave you story, they moved you forward in the mystery, um but the prayer cards, did they mean something, they didn’t seem to add //to my understanding  
*Researcher:* //Well they were just kind of  
*Abi:* Little solace, weren’t they, she [PJ’s mother] took – knowing now, what I know, she took refuge in religion to cope with the loss.

(A, 1070–5)

Eleanor’s synthetic response focuses on the way the letters led to temporal immersion by “mov[ing] you forward in the mystery”. The letters yield greater narrative substance than the prayer cards for her because the latter “didn’t ... add to my understanding”. Abi, on the other hand, finds a way of close reading the prayer cards by connecting them to PJ’s mother’s grief, interpreting them as symbols of “solace” and “refuge”. Finding a way of assimilating the prayer cards within the narrative as a whole, she thus offers a thematic response which is generated by both literary and emotional immersion.

Literary immersion can account for responses to textual features encountered in digital fiction. In addition, almost all participants commented on the visual aesthetics of *WALLPAPER*, either in relation to the textual features or the experience as a whole. Some participants felt the textual elements, and especially the floating rings, were “like ... beams of sunlight” and “the bit I liked best” (Eleanor, A, 810 and 33), and although Brendan, for example, perceived them as “very hard to read” (A, 36), he nonetheless admitted that “you could catch glimpses of words. And ...- even apart from the semantic meaning of each one, ... they just looked beautiful floating there, spinning in space” (A, 40–42).

Talking about the experience as a whole, participants commented that it “looked really beautiful” (Abi, A, 20–1) and was “a very pretty game” (Brendan, A, 812). Ivor connected the aesthetics of *WALLPAPER* explicitly

with feeling immersed: “I did like the aesthetic of it [the interface], that really drew me in, and I found it quite easy to place myself in that space” (Ivor, A, 27). Ivor’s use of “drew me in” draws on container, transportation, and magnetism metaphors to describe spatiotemporal immersion.

In the theoretical introduction to this chapter, we showed that Calleja’s (2011) category of “affective involvement” describes affective responses to particular aspects of a game including “the calming sensation of coming across an aesthetically pleasing scene” (44). In their examination of video-game experiences, Ermi and Mäyrä (2005) also suggest that “the audiovisual execution of games” can lead to what they define as “sensory immersion” in which “audiovisually impressive, three-dimensional and stereophonic worlds ... surround their players in a very comprehensive manner” (7). Throughout the analysis we have shown how audiovisual elements can lead to spatial, temporal, and spatiotemporal immersion. We would thus not restrict the construction of three-dimensional, aesthetically rich worlds to a category of immersion that operates independently of other forms of immersion. However, as the preceding data about the aesthetic qualities of *WALLPAPER* show, readers were taken by and/or immersed via the aesthetics of the literary game. We thus propose that “aesthetic immersion” can account for instances in which the aesthetics of the game alone lead to or else enhance other forms of immersion. This could be the gameworld space that readers explore or the aesthetics of textual elements, for example. Crucially, Ermi and Mäyrä suggest that “even those with less experience with games ... can recognize [sensory immersion]” (7). It is thus perhaps not surprising that even those participants, such as Abi, who declared that they had relatively little experience of gaming, appreciated the aesthetic qualities of *WALLPAPER*.

### *Site Specificity and Collaborative Immersion*

The analyses so far have focused on the readers’ reflections on their individually encountered *WALLPAPER* experience. However, given that *WALLPAPER* was experienced as a gallery installation into which other visitors could enter, the public, shared nature of *WALLPAPER* was also important for generating and preventing immersion. As explored above, Thon (2008) defines social immersion in relation to multiplayer interaction in MMORPGs as a “shift of attention to the other players as social actors and the relationship between them” (39). What this concept does not entail, however, is the kind of interaction and concomitant intersubjective immersion resulting from co-experienced, physical spaces within which a digital narrative is set – such as the installation space of the *WALLPAPER* exhibit.

The black box within which *WALLPAPER* was set up in the Bank Street Arts gallery could hold up to ten people, and visitors would regularly

co-experience the digital fiction, either by playing and being observed by others while doing so, or vice versa. This afforded interactions between users and observers and led to positively and negatively connoted perceptions and behaviours. In the following passage, Anna talks about how being exposed to other users' conversation about ludic elements in *WALLPAPER* allowed her to think strategically about her own gameplay:

*Anna:* Ah well see I did know there was going to be a percentage because I heard you talking when I came in ... Now obviously ... that made me //think about what I was doing in a different way

...

*Researcher:* Right, does it, does it?

*Anna:* It made a difference.

(PopUp, 810–16)

Anna's medial response focuses on the percentage score that is displayed at the end of each user's turn. She explains how she was primed for the ludic aspects of *WALLPAPER*, leading to a phenomenological difference to the way she strategically approached the literary game.

Bowman et al.'s (2013) research on how others affect performance and enjoyment of videogames finds that "game play in the presence of a physical audience significantly predicts increased game performance" (39). However, the potential psychological disadvantage of co-experiencing screen-based media with only one set of controls is (perceived) competition, which can result in a loss of confidence and/or feelings of inferiority towards other people in the room. Renee describes her experience of having to surrender the controls due to navigational difficulties:

I mean, I didn't get to do much in navigation, I started off doing it, because I wasn't on my own, I soon got the mouse taken off me 'cause I was bumping into things.

(B, 164–5)

A little later in the discussion, Renee specifies that she was with a friend, whose immersive needs seemed radically different from hers, thus mapping the clash between literary and ludic immersion onto two co-situated participants:

*Renee:* I was obviously here with a male friend

*Tom:* Mm

*Renee:* And he seemed to be like what you're saying, like – he's like, oh there's a photo, there's a postcard, right, pick it up, put it down, and I was like – you know, I was //like

*Tom:* //Hm

*Renee:* I was like – he was like just putting it back down again, I was like, no, I want to read that, //and he would just

*Tom:* //Mm, mm

*Louise:* //Mm

*Renee:* Like, kept going on and on

(B, 1523–33)

The approving interjections uttered by Tom and Louise seem to confirm that they can relate to Renee’s experience of wanting to immerse herself into deep attention and literary reading, while her “male friend” overrode her with his ludic immersion and completionist need to use the literary objects simply as instruments for quick interaction and progress.

Conversely, a participant from the same reading group noted that collaboration between different visitors could also lead to skill-based task assignment, thus facilitating literary immersion for the non-playing collaborator:

*Nora:* And I was really struggling with driving so I gave it to someone else, and once – and he was driving it like a bit faster

*Researcher:* Okay

*Nora:* So once he was doing that, it was a bit easier to actually look at the story

...

*Researcher:* So ... how was it to watch someone else make choices?

*Nora:* Um, it was fine ... someone else, uh, it was – I’m here ... with him like finding where the key was, and I could take in the story a little bit more

(B, 195–207)

Nora’s medial response suggests that the cognitive dissonance between literary and ludic immersion does not necessarily have to lead to exclusionary mechanisms and missed opportunities. Collaboration can thus enhance literary and ludic immersion as well as appreciation amongst cooperating readers.

To account for the way that readers can be immersed by other individuals in a shared physical space surrounding the digital fiction experience, we introduce the term “collaborative immersion”. This occurs when the actions or contributions of other people enhance other forms of immersion. That is, collaborative immersion is not a form of immersion that is experienced independently but rather co-enables or augments spatiotemporal, emotional, temporal, spatial, ludic, literary, and/or aesthetic immersion.

### **Immersion and the Mixing Console Metaphor**

The preceding analyses show that immersion is not a monolithic, static experience. Instead, because immersion is stimulated by multiple immersive features which interact with each other, readers are pushed and popped into and out of a storyworld at various times during their encounter with the text. Our analyses of reader constructions also show how participants' diverging attention to parts or aspects of that storyworld – as well as the extradiegetic environment of an exhibition space, in this particular case – throughout their reading leads to different types of immersive experiences with different levels of intensity.

Theoretically, we have shown that current theories define immersion as a totally enveloping experience, drawing on metaphors of submersion and/or transportation. However, the data show that readers move in and out of different aspects of the storyworld and/or are immersed in different ways and to varying degrees. We thus suggest that an alternative means of conceptualising immersion in 3D literary games in particular is needed to reflect the complexity of the experience.

In our previous empirical work, we used the metaphor of a switchboard to describe the dynamics and multidimensionality of immersion (Ensslin et al. 2019). However, the insights gained at a more advanced stage of this research suggest that the metaphor of a mixing console and resultant audio layering might more accurately frame the multidimensional, dynamic, con- and divergent, mutually responsive, and partly competing qualities of immersion. This new metaphor is used in the sense of a device that allows different degrees of (co-)activation and layering. Evidently, some elements of the metaphor are more salient than others. The data suggest that spatiotemporal immersion as a “sense of being present” (Ryan 2001: 122) or “transported onto the narrative scene” (Ryan 2015: 99) must take place before any other form of immersion can ensue, empirically validating Calleja's (2011) theoretical assumption that “without [spatial and kinesthetic involvement], incorporation cannot take place” (Calleja 2011: 170). We thus contend that the spatiotemporal immersion “fader” on the mixing console will always be engaged if readers are immersed. Spatial, temporal, and emotional immersion as “responses to setting” (Ryan 2015: 86), “that which keeps readers turning pages or spectators speculating about what will happen next” (Ryan 2015: 100), and “subjective reactions to characters” (Ryan 2015: 108), are less fundamental and will depend on the reader's proclivity for and curiosity about narrative elements of the game. Similarly, social immersion as “attention to other players as social actors” (Thon 2008: 39) and ludic immersion as “deep absorption in the performance of a task” (Ryan 2015: 246) depend on the reader's interest in and engagement with the interactive elements of the storyworld. Our new categories of literary immersion as attention to the



symbolical and/or figurative close reading of verbal elements in the text, and aesthetic immersion in which the aesthetics of the work's design cause or enhance immersion, depend on the subjective desire of the reader to attentively engage with literary and aesthetic elements of the narrative. Collaborative immersion as the way that readers can be immersed by other individuals in a shared physical space is clearly dependent on individuals being co-present but also the resultant immersive or anti-immersive effect that a co-present audience has on the reader. Conceptualising forms of immersion as different faders on the mixing console which can be turned up or down in isolation or in combination with other faders allows the multidimensionality of immersion to be reflected.

Importantly, the mixing console operation tends to be under the full, "top-down" control of its user (Yantis 1998). Conversely, immersion in digital fiction combines what Posner (1980) refers to as exogenous (reflexive, bottom-up, and responsive to external stimuli and thus involuntary) and endogenous (central, top-down, self-directed) "control of orienting" (19; see also Thon 2008: 32). Thus, our use of the mixing console metaphor should not be seen in user-operated terms but rather as an audience's experience of the sensory experience created via that mixing console. They will be affected by some outputs – that is, textual features that are responsible for immersion – over others and thus they will experience some form of immersion over others. Moreover, while we propose a new way of conceptualising immersion overall in digital fiction, the reader data show the centrality of spatiotemporal immersion in terms of perceived transportation to and resulting double-situatedness in a storyworld. We thus maintain that perceived transportation to a different time-space remains a fundamental part of immersion in digital media.

## Conclusion

This chapter has focused on immersion in a 3D literary game, *WALLPAPER*. Applying cognitive poetic principles to textual features, we have provided a new cognitive model for analysing immersion and, specifically, adapted DST to account for interactivity and multimodality both inside and outside a digital text. The analysis of reader constructions has also shown how participants across the four reading groups explicitly and implicitly conceptualised immersion. Readers largely discussed their synthetic and medial responses to *WALLPAPER* and specifically the ways that the narrative content and structure as well as medium-specific affordances contributed to a spooky, atmospheric, and engaging ludic experience. The focus on the way in which the narrative was constructed structurally and medially primed participants to think about the ways in which they experienced immersion synthetically, paying attention to transmedial and

medium-specific devices. That said, the data show evidence of participants seeking to understand how narrative and medial devices contributed to their mimetic and thematic responses. Thus, while they did focus on all aspects of our response framework in their discussions, where longer mimetic and thematic responses are evident, they were almost always stimulated by literary devices that readers encountered, including voiceovers and textual artefacts in the house.

In terms of contributing a more accurate, multidimensional theory of immersion, we have proposed the mixing console metaphor which we claim offers a nuanced understanding of medium-specific immersion and its numerous interfering layers. By analysing the way that different forms of immersion work alongside or against each other, we have shown that spatiotemporal immersion is the most pervasive and fundamental type of immersion, which must be established before any other form of immersion can ensue. Moreover, spatiotemporal immersion can facilitate or enhance other forms of immersion including narrative, ludic, literary, aesthetic, and spatial immersion. Indeed, forms of immersion will be experienced to greater or lesser degrees depending on the reader's interest in different features of the work.

Moreover, while some forms of immersion work together, our analyses also reveal a clash between attention directed to goal-directed, efficiency-oriented ludic interaction (ludic immersion) and the need to pay close and often critical attention to reading written materials in the storyworld with the aim of gaining a deeper understanding of the narrative context within which the story is set. We have introduced the latter as a new immersive category, defined as "literary immersion", aligning it closely with Hayles' (2007) well established concept of deep attention. Crucially, literary immersion is used to demarcate the reading of linguistic symbols for literary effect and close reading from both narrative immersion, which tends to be more macrostructural in nature, and from ludic immersion, which involves hyperattentive interactivity within the storyworld. While literary immersion is not necessarily a new concept, insofar as readers can become immersed in close reading texts across media, it has not been flagged as a distinctive type of immersion in existing research, and least of all in the context of digital media such as videogames. Our data also provide insight into the specific visual-aesthetic qualities of digital literary experiences, which can enhance sensory immersion, as in the case of readers being captivated by floating text circles and other types of visual literary art. To capture this form of engagement, we add "aesthetic immersion" to define instances in which the aesthetics of the game alone leads to or enhances other forms of immersion.

A crucial medium-specific factor that is often underrated but was flagged multiple times in our data is the site-specific constellation of the hardware.

Our analyses have emphasised the importance of combining site specificity with situation- and person-specific immersive experiences. The site-specific gothic effects of the darkened installation room were augmented by the participants being primed by the exterior of the installation and also noticing how the aesthetics of the storyworld and the exterior of the installation in the actual world were aligned. At the same time, incidental and non-planned ambient noises also contributed to immersion because they were brought into the immersed reader's attention scope as being part of the storyworld. To reflect these two phenomena, we have refined Kuzmičová's theory of environmental propping, proposing the new concepts of paratextual and incidental environmental propping. These new categories show how immersion in a storyworld can be created by scripted as well as incidental or non-planned extratextual features respectively.

Relatedly, our new category of collaborative immersion more accurately captures the co-experiential nature of site-specific narratives. Collaborative immersion occurs when the actions or contributions of other people enhance other forms of immersion. Participants reported varying effects of being aware of or being influenced cognitively and behaviourally by other people being present in the installation space. These experiences ranged from improved strategic thinking about one's own ludonarrative performance, to lowered confidence levels or even surrendering the game controls to co-present individuals that were felt to be more effective players. We have shown how greatly these needs can differ between co-experiencing individuals, and that one individual's ludic completionism can easily overrule another participant's need for literary immersion. However, that these two immersive preferences might just as well go hand in hand in truly collaborative interactive experiences was shown by participants reporting being able to focus on the story better after handing the controls to a more ludically immersed co-reader. Our data on co-presence and our new category of collaborative immersion thus make a contribution to the understanding of co-presence as a key situative factor in co-creating a degree of entertainment that all participants in a shared physical environment can enjoy.

## Note

- 1 Letters refer to the groups and associated transcripts and numbers to the line number(s) in the respective transcript. The data from this study can be accessed at: <http://doi.org/10.17032/shu-160006>

# 5 App Fiction and the Ethics of Ontological Ambiguity

## Introduction

The advent of mobile apps on tablets and smartphones in the first decade of the 21st century brought with it a host of new affordances for creative writing and digital-born fiction. Not only did it move reading out of domestic environments and into more flexible, open, and diverse spaces, it also transformed “our physical relationship with texts by co-opting many of our expectations of print and integrating them with a range of gesture-driven interactive elements” (Salter 2015). Swipe, tap, spread, and pinch gestures have opened up new ways of materialising readers’ interaction with text, affording direct skin-to-interface interactions. Similarly, the fact that digital fiction apps, or “app fictions” as we call them, look and feel very much like any other everyday touchscreen app used, for instance, for playing, shopping, and other online communication has contributed significantly to the blurring of boundaries between fact and fiction that has become a paradigm of our hypermediated reality.

In this chapter, we explore the ethical implications of narratives that play with the boundary between reality and fiction by examining the way readers interact with characters in app fiction. We begin with an exposition of app fiction in which we show how it can invite the reader to become part of the storyworld through engagement with spatiality, characters, and plotlines. We utilise online reader reviews and reading group discourse to show how readers individually and jointly negotiate their responses to Blast Theory’s (2015) app fiction *Karen*. We apply the cognitive model of reader self-positioning proposed in Chapters 2 and 3 – comprising authentic, reluctant role-player, willing role-player, and rejecter – and analyse the way that these four positions dynamically affect reader engagement with the narrative. We examine the interpersonal relationships that are formed between readers and characters, add “parasocial response” to our medium-conscious reader-response methodology to account for them, and address

the ethics of such fictional involvement. We empirically operationalise Phelan's (2005) ethical situation model for its application to reader data, and develop and extend this print-based method to account for the participatory nature of ethical positioning across and beyond digital narratives. We conclude that, while all narratives that play with ontological boundaries can theoretically generate ethical responses, *Karen* foregrounds that experience because of its focus on and invocation of the reader's personal life and the medium specifics of its mobile fictional involvement.

### App Fiction

As a form of digital fiction, we propose that the term "app fiction" refers to fiction that is written for and read on a mobile device, such as a smartphone, smartwatch, or tablet, that pursues its verbal, discursive and/or conceptual complexity through the affordances of app technology, and would lose something of its aesthetic and semiotic function if it were removed from that mobile, digital context. App fictions are multimodal and interactive. Some combine text with image only and others utilise sound and film more extensively. Like hypertext fiction, app fictions utilise hyperlinks to allow the reader to make choices about the direction of the narrative. In what are predominantly text- and image-based app fictions, such as Steve Jackson's (2014) *Sorcery!* and Inkle's (2012) *Future Voices* collection, readers use the touchscreen to select from multiple choices onscreen which determine their path through the story. Other apps allow readers to explore the narrative by utilising the gestural affordances of touchscreen technology. David Wiesner's (2015) children's app fiction *Spot*, for example, plunges its readers into a multiply embedded universe of anthropomorphic insects, robots, and other nonhuman creatures, which must be navigated by using the pinch (open and close) and slide gestures to explore the storyworld. Readers of Samantha Gorman and Danny Cannizzaro's (2015) *Pry* use a variety of touchscreen gestures to navigate the text's multilayered content, which involves prying open lines of text to obtain film footage of the protagonist James's memories of his experience of the First Gulf War. Utilising film footage as its primary storytelling mode, in Sam Barlow and Furious Bee's *Telling Lies* (2019), readers must use their own search terms to explore a database of video clips, cumulatively piecing together the story. Subtitles can also be used as a basis for the search, with readers able to use the touchscreen to select what they think are pertinent words or phrases which might link to the key video clips.

While some app fictions can be read anywhere, others utilise locative media to create mobile storytelling (cf. Raley 2010; Abba et al. 2021). In *Story City* (2016), fragments of the narrative – as audio or text – are unlocked as readers walk through a number of Australian cities to reveal

location-specific hotspots which reveal parts of the narrative, thus asking readers to imagine the fictional story alongside their current physical location in the actual world. Representing a non-site-specific, but similarly ontologically blended, storytelling experience, *Zombies, Run!*, by Naomi Alderman and Rebecca Levene (2012), is an augmented-reality narrative for smartphones that allows users to listen to an immersive audio drama while they run. Once each story mission is complete, the runner can click on an in-app map that shows their route in the actual world and the fictional artefacts in an inventory that they have collected on their mission (e.g., medical supplies, clothing). This app fiction thus combines storytelling and gameplay in a storyworld with the reader's exercise regime in the actual world.

### **Our Empirical Study on Blended Worlds**

As the preceding overview shows, app fictions require readers to co-construct the narrative using hypertextual, gestural, and locative devices. In this chapter, we report on a study in which we empirically investigated the way in which the reader's participatory involvement with app fiction can lead to what we have previously theoretically defined as a "blending of worlds" (Ensslin and Bell 2021: 78), in which the boundary between a digitally mediated storyworld and the actual world is ambiguated.

Our case-study text is *Karen*, an app fiction for smartphones published by Blast Theory in 2015. It uses full-motion video and interactive interface elements to construct a storyworld around protagonist Karen, a woman living in the south of England, who is assigned as the reader's life coach. Over the course of eight days, readers receive 17 short video calls from Karen in which she directly addresses the reader using the second-person "you", giving the impression that the reader and Karen are in dialogue. In each call, she divulges information about herself or else gathers information about the reader by asking them multiple-choice questions, requiring them to input text, or select a point on a slider scale question. Reader responses are thus utilised in the narrative. For example, Karen asks us what we would like to focus on in the life-coaching sessions and she seems to respond to the multiple-choice option we choose; Karen asks us the name of our "significant other" with the name we give used later in the narrative when she asks readers a question about relationships. The entire *Karen* experience implies that the reader is in a serialised conversation with Karen. If the reader misses a scheduled interaction with Karen, they receive a text message notification from her, which, like the multiple questions, range from friendly and innocuous (e.g., "I'm ready to get going when you are") to overfamiliar and potentially noncommittal while, at the same time, quite pushy ("Erm, yeah, we should do a session").

As the narrative progresses, the questions that Karen asks change from being predominantly appropriate to distinctly unprofessional. She asks us whether she should “go for it” (episode 6) with her date and tells us about the hedonistic lifestyle she used to live. In the tenth episode of the serial, a character called Dave (Karen’s flatmate) begins calling readers – initially without Karen’s knowledge – in order to undermine the apparent confidentiality of the coaching process and admit his romantic feelings for Karen. Meanwhile, Karen becomes increasingly erratic, and she and other characters cross more personal boundaries, with Karen ultimately asking readers to help her with her dysfunctional romantic relationship with Dave. In the last interaction, and without warning that the narrative is about to end, readers see Karen’s empty flat with her belongings removed, as though she never existed or else she has left, never to return. However, she has taken with her the reader’s responses to her questions and thus any personal information that they have given. The abrupt disappearance of Karen at the end of the narrative models and potentially problematises the way in which individuals might readily give out personal information about themselves in digitally mediated communication to people they do not know or whose ontological status is unclear. The work thus explores the potential changes in our perception of reality, and the new ontological encounters, ambiguities, and uncertainties that digital worlds can create.

Once the narrative is over, readers can elect to buy a data report which psychometrically analyses their multiple-choice, sliding-scale, and free-text responses to *Karen*, offering some insight into the way they have engaged with the experience. Thus, their role in the storyworld is seen as reflecting the way they would behave in the actual world. Yet, while the *Karen* app is intended to give a semblance of and allow readers to participate in life coaching, Karen’s incompetence and inappropriate behaviour as well as the humour elicited by the multiple-choice responses that readers are offered show that it is not an authentic life-coaching experience. Karen is not real and, because the actor playing her is performing a script, the reader cannot interrupt, guide, or respond to the conversation as they would in interactions with real people in the actual world. However, as we show in this chapter, the familiarity of the interaction, the way in which Karen responds to the reader’s input, and the accustomed conventions of digitally mediated communication on which the app relies all combine to make the experience feel very real – sometimes too real – for many readers.

### *The Protocol*

Our empirical approach to *Karen* has two parts: app-store reviews and reading group data. These two data sources were adopted as they allowed

us to triangulate our findings by combining evaluative overviews with sustained talk about the text. Unlike the digital fictions investigated in this book so far, *Karen* is available to download on the Apple App Store and Google Play, which are both digital distribution platforms that encourage users to submit reviews. The app-store reviews of *Karen* thus give a good insight into how readers responded to the text overall. Moreover, as Nuttall (2017) explains, online review platforms allow readers “to comment without formal or conventional constraint on their understandings, feelings and associations in relation to the text, and are encouraged to do so by the degree of anonymity offered by this mode of discourse” (156). The reviews thus provide access to asynchronous naturalistic data in which contributors are not influenced by or even aware of the study design. The app-store reviews were harvested from the Apple App Store between January 2015 and December 2020 and from Google Play between November 2015 (when the app was released for Android) and December 2020.<sup>1</sup> All reviews were transferred into a word processor so that they could be thematically coded using NVivo software. This dataset comprises 83 reviews from 83 individual reviewers written in English, ranging between 1 and 198 words in length. As these were online reviews, reviewers’ general media usage, experience, and confidence was not available for us to collect for this dataset.

The reading group discussions also provide naturalistic data but with the caveat that, unlike the online reviewers, the readers knew that they were part of an empirical study. The reading group study took place between February 2016 and May 2017, and involved 20 participants (32–76 years of age) who were members of five different book groups in cities in the North of England in the UK. Group D had been meeting since 2004, with the others established in 2016. In terms of purposive sampling, these groups were approached because they were open to reading a range of fiction across media; for example, one group regularly read graphic novels and another would discuss theatre performances. All participants read fiction on a regular basis and were competent smartphone users. Very few of the participants played computer games regularly. Only two participants declared that they had read digital fiction before, but app-store reviews of *Karen* also indicated that very few people had experience of this kind of fiction before they encountered the app either. The digital reading experience of the participants thus matched that of the more general *Karen* app audience. The reading group discussions, unlike the reviews, allowed us to access a protracted conversation about *Karen* in which participants individually and jointly negotiated their responses to the app. This dataset thus gives more detailed and sustained insight into how readers responded to *Karen* while also revealing details about some specific scenes that stimulated a particular response.

Participants were each asked to experience *Karen* individually and then meet up in their respective book groups to discuss it together. The reading



group participants were given relatively modest and unobtrusive instructions in terms of what to discuss in order to reassure them that we were not looking for any right or wrong responses. Due to the interactive nature of the narrative, we expected that participants would comment on the protagonist Karen, but since the study aimed to elicit responses about the ontologically intrusive nature of the app, participant instructions explicitly invited them to discuss: “the story experience as a whole (i.e., the story itself and also their responses to experiencing the story on a mobile phone); the main character Karen; their relationship to Karen; and anything else they would like to talk about”. The discussions were audio recorded and subsequently transcribed. Both datasets were coded for emerging themes using NVivo, with data within emerging themes subsequently analysed linguistically.

In what follows, we analyse the reader constructions from both data sets, paying attention to both explicit language use about the ontology of the experience, and implicit linguistic cues in reader responses that indicate a perceived relationship with the storyworld and its characters. We also analyse textual features that could lead to the reader constructions in the data, applying and modifying theoretical models where needed. The result is an empirically grounded understanding of the relationship between readers and an ontologically playful and ambiguous storyworld that is created by a mobile interactive digital narrative.

## Analysis

The app-store reviews and reading group data show some polarised responses to the app which inevitably affected the focus of the review or discussion. Since the reviews principally act to recommend or discourage others from downloading an app, they often focus on *Karen*'s merits or pitfalls, with users usually rating the app by giving it a score of between one and five stars. Thus, the app reviews are often brazen and frank, and sometimes impassioned responses (cf. Driscoll and Rehberg Sedo 2019). In addition to commenting on the quality of *Karen* in terms of its narrative content and technological affordances, reviews on the Apple App Store and Google Play often commented on the reader's role and/or the ontological status of the narrative.

The reading groups, on the other hand, comprised multiple readers who used the session to synchronously discuss but also jointly negotiate their responses to *Karen*. As Peplow (2016) shows, “literary interpretation in the book group context is necessarily collaborative [and] the interpretations that individual readers bring to meetings are updated and modified as a result of other readers' views” (62). Thus, “what is produced in the talk [of book groups] is group reading(s) rather than isolated, individual action” (76). Corresponding with Peplow's empirical insights, the focus of

the groups' discussions in our study was not only determined by the topics specified by us as researchers but also by what individual members brought to the discussion, as well as the way that the other members responded to and/or guided the discussion topics.

Overall, Group A comprised five people who talked for just over an hour, with the discussion often returning to the way they felt about their relationship with Karen. Group B was attended by three people who spoke for only 20 minutes and, while not instructed to score the app, assigned it a score of zero out of five. The four participants in Group C also only spoke for just over 20 minutes and generally disliked the experience. Both these groups felt negatively about the way that the app asked them to co-construct the narrative and offer information about themselves. Group D consisted of three readers who did not universally like *Karen* but had a measured discussion for over an hour about Karen as a character and the way that their responses were used. Group E had the longest discussion at one hour and 15 minutes and engaged in a fairly complex analytical discussion about the characters and their attitude to the experience. Thus, as the analysis will show in more detail, they all discussed the relationship between the storyworld and the actual world to some degree.

### *Feeling Real*

What emerged from the coding of both the reviews and reading group data was that many readers of *Karen* reflect on the interplay between what people know is a fictional experience and what appears to be a real interaction. Many of the 5-star reviews explicitly cited its mixed ontology as one of the reasons they enjoyed the experience. One five-star review reads: "Immersive, Interactive, Unique mixed-reality game, feels real, has a lasting impact" (GR24).<sup>2</sup> This positive review is at least partially based on the fact that the experience "feels real" with the response to the experience "lasting" beyond contact with the app. Another five-star review is entitled "It all feels too real" (AR9) with the adverb "too" indicating an uneasiness about the level of authenticity, even though the reviewer states that they "loved it" (AR9). Other 5-star reviews comment that: "This is very real" (AR12) and that "It's very hard at times to distinguish fact from fiction" (AR43). In these mimetic responses to *Karen* we see readers explicitly reflecting on the auto-mimetic nature of the narrative, in which the verisimilitude of the experience is both enjoyable and uncomfortable precisely because of its paradoxical status as a potentially realistic but ultimately fictional interaction between Karen and the reader as a participant in that conversion.

In terms of mediality, there are various devices that make *Karen* feel realistic. First, the interaction takes place on the reader's smartphone or tablet and thus on a device with which they will likely take part in the digital communicative methods that the app exploits in their daily life. The use

of the full-motion video feels like a real Zoom or FaceTime call and the notifications mirror messages that readers would receive from any other app and appear alongside notifications from real people such as text messages or emails. Thus, the *Karen* experience exploits and blends into the user's everyday interaction with their mobile device, playing with the distinction between reality and fiction via its digital media affordances.

The app is classified as “Entertainment” on the Apple and Google Play app stores, offering a paratextual clue as to its fictional status, with textual features within the app also indicating its fictionality. In readers' first encounter with the app, Karen walks through a street in the UK and up some stairs into her flat. She looks into the camera and says enthusiastically “I'm looking forward to getting to know you” with the use of a second-person address directed at the reader. However, she undermines her authority as our life coach by adding “a bit nervous”. Once she has entered her flat, she sits down in front of a bookshelf which gives the impression of an educated, well-informed persona. However, Karen is dressed in casual clothing – a tracksuit and her coat – and she slurps loudly from a Diet Coke can (see Figure 5.1). The first question that Karen asks the reader to respond to is prefaced with “I am knackered”. This low-register and colloquial adjective represents an overfamiliar and unsuitable declaration in a professional life-coaching session, particularly for a first meeting. One of the answers from which the reader can choose – “This feels weird” – pre-emptly what they might be feeling about being in a life-coaching session with a stranger for the first time. However, it also represents potential responses to Karen's informal and overfamiliar style.



Figure 5.1 Screenshot from episode 1 of *Karen*

Karen does initially ask questions that a life coach might ask of their clients. For example, in episode 2, she asks “Which area is most important for you right now?”, with readers asked to choose between “I want to take more control in my life”, “I want to change my attitudes to relationships”, and “I want to review my life goals”, all of which are topics that could be discussed in a life-coaching session. From episode 3 onwards, however, Karen begins to ask more intimate and inappropriate questions which undermine her credibility. The multiple-choice responses offered to readers also become more ironic, cynical, and/or confrontational in style. For example, in episode 5 Karen is in her bathroom as opposed to her previous position in front of her bookshelf and she is getting ready to go out. She asks the reader, “Did I ever tell you about my ecstasy days?” with readers presented with the following options: “Oh, great. A drugs story”, “No, you never told me”, and “Please ... go on”. The first response implies that the reader is unimpressed, the second is noncommittal, and the third explicitly asks for more detail. However, the style of each response is colloquial with response 1 particularly sarcastic in tone. Importantly, in all video calls and in the onscreen questions, Karen addresses readers using the second person (see Chapter 2). As we explore in the next section, readers can accept or reject the qualities associated with the pronouns or else play a role, with the position they adopt affecting the way that they engage with the protagonist Karen. We thus reconfirm and further refine the quadripartite model of reader self-positioning proposed in Chapters 2 and 3.

#### *Authentics, Willing Role-Players, Reluctant Role-Players, Rejecters*

Across all reading groups, participants had extensive discussions about whether they were responding to Karen as themselves or not and remarked on the fact that they could be themselves or they could play a role. We thus see evidence of the three different positions outlined in Chapter 2: authentics, reluctant role-players, and rejecters. However, as we show below, the nature of the role-players is slightly different in the *Karen* dataset because some readers seemed to enjoy the opportunity to play a role and therefore align with “willing role-play” introduced in Chapter 3. Readers’ perspective on who they are when interacting with *Karen* is represented by an extract from Group A:

*Laura:* I don’t know if it’s me or not

*Nancy:* ‘Cause there are so many variables. ‘Cause that comes right back to who you are when you’re interacting with it

*Annie:* Yeah

*Nancy:* You know, are you you? Are you someone else? And throughout it, you’re probably lots of different people actually

*Laura:* Well it depends

*Nancy:* Sometimes you're you, sometimes you're //

*Kim:* // It's funny that you two said that thing about not knowing quite who to – quite which character to play ... 'Cause I didn't think that at all

*Annie:* Yeah I thought I was just me

*Kim:* Yeah I was as well

(A, 821–835)<sup>3</sup>

In these automimetic responses, the participants evaluate the extent to which “you” represents them. Kim and Annie report that they are themselves throughout the entire experience and thus rather than feeling doubly situated (Ensslin 2009), they are acting as themselves in the actual world only. They do not perceive that they are playing a role but are “authentic”, identifying with the “you”s either as “authentic participation” (Bell 2022) in which they willingly participate as themselves (e.g., assuming the identity of a reader). On the other hand, Laura and Nancy suggest that their position switches throughout the experience. Nancy’s question, “You know, are you you?” is notable in its use of the second person because it shows the ambiguity and flexibility of the pronoun. The first “you” in this case is used as part of a discourse marker to signal the beginning of Nancy’s point and is intended to refer to the other participants collectively at the immediate point in time. The second “you” refers to a blend of an implied, general, or theoretical reader and the participants as actual readers, and the third “you” to an authentic “you” (a version of the actual, flesh-and-blood reader) that they could potentially role-play when they are interacting with Karen. The referential multiplicity demonstrates that some participants sometimes feel that they are authentically being themselves and sometimes they are not. There is a recognition, then, that participants switch roles, depending on the context and, potentially, the questions they are asked.

Other readers’ automimetic responses across the groups show that readers could not always authentically be themselves during the experience because the multiple-choice options available to them did not allow them to do so. However, they felt some degree of association between the actualised address “you” and themselves. For example, Tracey says: “I would have answered something else but wasn’t given the choice” (C, 76) and David that he “ended up ... giving an answer which was the least worst option rather than the one that I would have given” (D, 438–9). In these cases, the interactive function of the text precludes full identification with the “you”s in the text because the options available do not appeal to the reader. These readers thus have to adopt a role-player position because a position that represents them is not available. They are reluctant

“role-players” who assume an identity or characteristic because the “you” has consistently coerced them into feeling that that position is at least partially true, simply because they feel “you” refers to them to some degree.

However, while some participants felt compromised by the lack of choice, others liked the fact that they could play around with their role:

*Will:* what I liked was that it ... forced you into a consciousness of how you positioned yourself with Karen

*Lily:* Yeah

*Will:* //So

*Rose:* //Yeah

*Will:* When she asks you what shall I do, you have to think ... am I going to answer what I would answer, it's ... as if – yeah ... As if I believe – as if Karen is a person, or am I gonna answer as if I'm in a story and I want her to do the thing that's gonna get her in trouble.

(E, 46–57)

Will's automimetic response suggests that there are two options, and these depend on whether he pretends the interaction is real or whether he plays along with it as fictional. If it is real, he would answer one way but if he decides that this is a fiction, then he can do what he wants and, for him, that would be doing something that would get Karen into trouble – presumably something that he would not do to someone in real life. In this case the referential ambiguity of “you” is liberating for Will. We see evidence of the “willing role-player” position developed in Chapter 3. Unlike the readers of *The Futographer*, however, readers of *Karen* are explicitly presented with options from which they can choose behavioural or emotional stances and thus more explicitly willingly and often gratifyingly adopt a role-playing position because they want to experiment with what might happen if they choose a particularly controversial answer.

Others across the groups did not appreciate being characterised by Karen in particular ways and thus assumed a “rejecter” position. Adam, for example, stated that “There was a lot of assumptions made about who you were and even with the ... questioning ... I didn't react very well to those assumptions” (E, 16–19). He felt characterised in a way he did not like and thus rejected the way the app depicted him. Debbie “found the whole process rather uncomfortable and intrusive, and actually I found it forced me into positions that I didn't want to take” (C, 28–30). Thus the “you”s she was asked to respond to and thus implicitly adopt did not represent her but they were also “uncomfortable and intrusive”, placing her in a compromising position. Likewise, others in a different group express concern about the role they were being asked to take on:

- Linda:* And I think it was trying to get an emotional reaction from you really
- Mae:* Yeah, yeah
- Linda:* That was what I felt, and in fact, I think the whole of the story was about that and you know, I was becoming quite judgemental, and um – it was all very – pretty unsatisfactory
- Mae:* Yeah
- Linda:* Unpleasant really
- David:* Well it's putting us the reader... in quite a difficult situation
- Linda:* Yeah, 'cause she was doing sort of ambiguous stuff ... Saying, should I, shouldn't I ... getting us to support her in a way.
- (D, 829–836)

The participants here discuss the aim of the app and implicitly the intentions of its creators. Linda suggests that the app was designed to elicit an emotional response and that it made her “judgemental”, which felt “unpleasant”. David comments on the moral and ethical challenge associated with being in dialogue with Karen. He feels that he is put in a “difficult situation”, not just by the answers he gives but simply by being asked to answer at all.

In the examples above, some readers want to give an automimetic response that authentically represents them as they are in the actual world and feel uncomfortable when forced to accept a statement that does not fit this. Others willingly give an automimetic response relative to a role they take on. There is, in both cases, a concern with whether they could engage with the app in ways that represent them and/or are plausible and thus display an interest “in the narrative world as like [their] own” (Phelan 2005: 20). As in Chapters 2, 3, and 4, therefore, their mimetic response to “you” can also be seen as automimetic. Readers become part of the narrative, thus forming “evolving judgements and emotions” about their “desires, hopes, expectations, satisfactions, and disappointments” (Phelan and Rabinowitz 2012: 7), not just about the characters, but also about their role in the storyworld.

The app-store reviews also show evidence of the authentic (e.g., “Have I told Karen too much about myself? [AR10]), reluctant role-player (e.g., I couldn't answer questions the way I wanted” [AR22]), willing role-player (e.g., “Karen - I love you, and one day I'll choose the right in-game options to make you love me too” [AR47]), and rejecter positions (e.g., “I was intrigued by this but it was a waste of time. It's ... a strange interactive experience with a fictional overdramatic and unprofessional life coach” [GR10]). Not only does this show that the reader position framework reflects reader responses to *Karen* more broadly, it also shows the wider applicability of the model in general across different readers in different reading contexts and accessed via different protocols. More specifically, it

shows that reader self-positions can be observed in reader responses to hypertext and hypermedia fiction via semi-structured interviews as in Chapters 2 and 3 as well as from reading group discussions and online reviews about app fiction. This additional evidence thus demonstrates the wider generalisability of the model.

Perhaps as a consequence of the word limit and associated brevity of the online review format, the reviews suggest the four stances outlined above are absolute and thus that these positions are fixed. However, in the reading groups where readers have more space to explain their reactions to the ongoing narrative, the data show how they move in and out of these roles throughout their encounter with the text; they might feel like themselves at some points – adopting the authentic position – while deciding to role-play at others. Yet, readers tended only to move from authentic to role-player and vice versa or rejecter to role-player and vice versa. The authentic and the rejecter positions are thus preferred approaches for some participants, but out of necessity they have to take on the role-player position in order to continue through the text. The reading group data do not suggest that readers moved from authentic to rejecter or vice versa, which implies that these two positions were relatively fixed, with the role-player position adopted as required at particular points in the narrative or else as a sustained strategy to experiment with playing a role throughout the experience. Overall, therefore, as also observed in Chapters 2 and 3, the data show a tendency for readers to self-fictionalise in the course of their engagement with *Karen* either willingly or reluctantly, depending on how they perceive their relationship with the “you” in the app’s use of actualised address.

### *Parasocial Response*

Irrespective of which position the reader took, all participants had strong reactions to the character Karen. Typical responses were that she was “self-obsessed” (B, 66) and “unprofessional” (B, 292) because of her behaviour and the inappropriate relationship she attempts to establish with the reader. Readers across the groups noted her poor emotional state, describing her as “troubled” (D, 862), “unhinged and desperate” (A, 632), “want[ing] reassurance” (A, 487–8), and that she was “a bit of a train wreck” (E, 3). Her volatility was also observed in that she was “a completely different person from one day to the next” (C, 422). The app-store reviews similarly commented on Karen’s character, noting that she is “quite annoyingly clingy and desperate” (AR35) and “damaged, clingy and needy” (AR25).

In the reading groups, readers’ overall assessment of Karen tended to affect the way that they responded to her and thus whether they felt able to build a relationship with her. However, almost all participants remarked on Karen’s vulnerability to some extent. For example, David says:



I thought she became rather a dull person, and somebody who was in some distress, which in ... many ways was quite painful to observe, the decline of her life, so to speak ... but it wasn't a particularly interesting experience, because although it appeared to ... be asking you questions about yourself, largely speaking, ... really those answers you gave were being ignored ... and in some ways I found it quite disturbing, the way she seemed to kind of effectively break down and also her – apparently kind of loose sex, one-night stands etcetera.

(D, 11–24)

The medial part of David's response shows that he does not find the experience "particularly interesting" because he felt his "answers were being ignored" and thus the responses he got did not cohere with his interactions with the app. The barrier to interest in *Karen* here is the lack of agency he felt, so that while he shows evidence of some investment in the experience, this is not rewarded. His mimetic and thematic responses show that he finds Karen a "dull person". However, he does still feel sympathy for her. In addition, while he finds Karen's behaviour "painful", this is something that he "observes" – a verb that implies that he feels separate from Karen's actions and perhaps even the world she is in. Thus, while his medial response to the participatory nature of the experience shows some frustration with the app, he does still report feeling emotionally immersed (see Chapter 4) in the narrative.

Other participants felt that the relationship was more intense and this was where the "authentic" position in particular made people feel as though they had a relationship with Karen that generated genuine feelings and/or a genuine relationship with her. In the following extract, Laura describes the moment where she moved from being a willing role-player to an authentic:

But actually there did come a point where she was obviously unravelling, that I began to feel like I was being manipulative, do you know what I mean ... I began to feel like I was part of the problem, and that's when I started – no, I don't know what you're talking about, no I don't know what you mean, uh no Karen I don't think you should do that kinda thing, but you see I actually started to feel responsible for her unravelling.

(A, 509–12)

Laura reports changing her responses to Karen's questions so that she is guiding her out of poor life choices with the interactive function required of Laura causing a significant feeling of unease. Even though Laura knows the experience is fictional, her automimetic response shows that she feels a

strong emotional burden as a consequence of her actions. She moves from experimenting with a particular role to engaging in prosocial behaviour in which she feels she has to help Karen. This emotional response is qualitatively different to the sympathy felt by David, who sees Karen's situation from the outside, and is instead related to the "responsib[ility]" Laura feels that her actions have. Importantly, Laura's use of the adjectives "manipulative" and "responsible" suggest that she owns the actions and that they have an impact not just in the storyworld, but also in the actual world by making her feel bad about her genuine self. Unlike David, therefore, Laura feels that her choices give her some agency or at least that her choices had consequences and the consequences feed back to highlight her agency. The automimetic nature of the experience thus results in unpleasant consequences for Laura.

David's and Laura's responses are representative of the discussions held across the reading groups about Karen as a character, with many participants feeling some sympathy or responsibility for her. Some of the app-store reviews explicitly comment on the way in which *Karen* encourages a relationship with the protagonist. One explicitly talks about the relationship that is developed during the course of the app: "As you get to know Karen the life coach she opens up and you develop a friendship with her" (GR9). Another review is entitled "My new best friend" with the review stating "Karen's ace!! She'd be great fun on a night out!!" (AR24). While the title of this latter review likely exaggerates the extent of the relationship formed, the review as a whole shows how the reader has evaluated Karen's characteristics and even speculated on how it would feel to socialise with her outside the app.

The responses about relationships with Karen can be explained on the basis of parasocial interaction and parasocial relationships. The term "parasocial interaction" was coined by Horton and Wohl in 1956, originally to describe the process by which viewers of TV and film can form a relationship with TV show hosts and fictional characters. It has subsequently been adopted in media and communication theory to account for relationships formed between viewers and real TV personalities as well as fictional characters across media. As Brown explains, "parasocial interaction is the process of developing an imaginary relationship with a mediated persona both during and after media consumption which begins with spending time with the persona through media or participation in mediated events" (Brown 2015: 275). It is thus an emotional state in which audiences feel as though they have a relationship with a real person that they do not know or a fictional character of some kind, and with whom they are familiar because of a mediated experience. Typically, they are stimulated by newsreaders, comedians, game-show hosts, radio presenters, soap-opera characters (see Giles 2002), sitcoms (Eyal and Cohen 2006),

and, most relevantly for this chapter, characters in role-playing games (Stenros & Montola 2011), videogames (Hartmann 2008), and real or virtual individuals (influencers) on social media (Chen 2016). Crucially, as Brown (2015) explains, parasocial interaction can develop “with a persona who is liked or one who is not liked” (Brown 2015: 267) so that this psychological phenomenon is not dependent on a person forming a positive bond with the mediated person. However, the feelings generated by parasocial interaction can be as intense as those generated by interactions with people we know, if not more so. As Shedlosky-Shoemaker et al. (2014) note, while “relationships with fictional characters lack reciprocity, ... such relationships can feel real to the audience members, and accordingly, have psychological consequences that parallel those incurred as a result of social interactions” (556–7).

While the data so far show that not all readers developed a positive relationship with Karen, David’s, Laura’s, and the three app-store responses show evidence of parasocial interaction. Of course, Karen, as the fictional object of the reader’s affections, is necessarily unaware of the audience’s existence and feelings, which confirms that parasocial relationships are necessarily unidirectional in this case. However, despite this ontological axiom, many readers nevertheless emotionally responded to and developed feelings towards Karen, whether they like her or not, and/or whether or not, like David, they found the experience unsatisfying.

The way in which Karen engages readers is important for understanding the way that parasocial interaction is encouraged by the app, and one of the reviews in our dataset explicitly comments on the textual features responsible for engaging them: “Karen looked straight through the screen and into my eyes (and soul) and found intimacy in the remote” (AR9). While this review focuses on Karen’s gaze, an analysis of a representative session with Karen shows how linguistic, multimodal, and medial features collectively encourage parasocial interaction. In the following extract from episode 7, Karen has just asked readers to take part in a series of life-coaching questions about their “significant other”. Up until this point in the episode, her demeanour has been professional and the questions and responses she has offered have been appropriate for a life-coaching session:

I know it’s only natural to think the best about people we’re closest to but, believe me, that is an exercise well worth doing.

I know that since splitting from Charlie, well.... I’ve doubted myself with other people in my low moments. Maybe you’ve had that feeling though, sometimes, that we’re all part of some big pulsating universe that is driven purely by love? <Looks away from the camera for two seconds> I’m lucky in that I get on with most people – I like working with people. It’s up to me to make it happen, right?



*Figure 5.2* Screenshot of Karen in episode 7 of *Karen*

As shown in Figure 5.2, during this scene, Karen is dressed in smart clothing and sitting in her flat. She has a slightly messy hairstyle, and a not-so-corporate-looking mug. We can see her domestic setting, but it is tidy and she appears prepared for the session. We thus see a mix of formal and informal here but with an attempt at a professional appearance.

In the first sentence of the extract, Karen looks directly at the camera, inviting sustained eye contact with the reader as she speaks. She uses linguistic structures that demonstrate a high level of certainty. This includes un-hedged copulas (“it is” and “that is”), the modal lexical verb “I know”, and a series of declarative clauses (“I know it’s only natural to think” and “that is an exercise well worth doing”) and imperatives (“believe me”) which show self-assurance and confidence in what is being said.

In the second part of her monologue (beginning “I know” above), she switches into a more uncertain and contemplative style. She looks away from the camera for two seconds, as if unsure about what she is about to say. As in the first part of the extract, she begins this part of the discourse with the modal lexical verb “I know”, but the language in this section suggests uncertainty in general. The discourse marker “well” followed by a pause suggests she is hedging what she is about to say. Adverbs “maybe” and “sometimes” imply less certainty than the more self-assured assertions she uses earlier. She admits “I’ve doubted myself” which is expressed using an un-hedged and thus definitive grammatical construction. The un-modalised construction “I’m lucky” also appears in a sentence in which she claims that she “gets on with most people”. However, given Karen’s behaviour, it is likely that at least most readers will have experienced some

frustrations with her and would not necessarily get on with her. The responses to Karen in our data above confirm this. She also ends with a tag question – “right?” – for the reader, suggesting she is uncertain about the statement she has just made.

At the end of Karen’s monologue, readers are presented with the following onscreen question: “It’s up to me to make it happen, right?” Responses they can choose from are: “The Universe? Yes, it’s up to you”, “Sometimes you can’t control how things go”, and “It’s just luck, good or bad”. The first option represents a sardonic response, the style of which is sometimes seen in other parts of the app. However, the last two present relatively sensitive responses to Karen’s contemplations which demonstrate sincere engagement with her question. The content of Karen’s monologue and the resulting questions thus show that the reader is invited to emotionally support Karen at this point.

The disparity between the way in which Karen acts in some parts of the app (e.g., asking whether she should pursue a one-night stand) and how Karen presents herself in this scene – and thus at least how she would like herself to be – makes Karen seem vulnerable. In the scene analysed above she moves from being confident to uncertain, both linguistically and in terms of eye contact, and this is typical of the way that Karen acts and the communicative style she uses throughout the app. It demonstrates the way that Karen can generate the general observations that she is “unhinged and desperate”, “wanted reassurance”, and “is a completely different person from one day to the next” seen in the data above, but also the parasocial relationships that some readers in the reading groups and reviews seem to develop with her.

In terms of response type, when readers comment on their relationship with Karen, they do not always (only) offer a mimetic or automimetic response in which they focus on the extent to which a text corresponds to the actual world and/or is believable, or a thematic response in which they are engaged in an interpretation of the text. Rather, they focus on their relationship with the character. While readers do not always explicitly acknowledge it in their reviews or discussions, as the preceding analysis of *Karen* shows, their relationship with Karen is facilitated by the medium-specific affordances on which the app relies, including full-motion video and interactive interface elements, and thus their relationship is implicitly predicated on a particular medial reading context. Yet, while the mediality of the experience forms the basis for the interaction, it is the relationship with the character specifically that the readers respond to in the examples above.

To capture the way in which readers talk about their relationship with Karen, we propose adding “parasocial response” to our medium-conscious reader-response framework. This response type is related to and inspired by the concept of parasocial interaction as originally proposed by Horton

and Wohl and subsequently developed by others. We define it as: an audience's response to and interest in the relationships they form with characters in a fictional narrative. However, since parasocial response hinges on the idea that audiences treat the character as though they were real and Phelan's existing category of mimetic readings already "involve[s] an audience's interest in the characters as possible people and in the narrative world as like our own" (Phelan 2005: 20), we see parasocial response as a subcategory of automimetic response. It occurs when the audience's interest in the characters as possible people extends to interest in the relationships that they form with them.

Parasocial responses are seen in the *Karen* data when readers talk about their relationship with Karen including feeling responsible for her or that she becomes their friend. Since parasocial interaction can be generated by mediated personas and characters across media, parasocial responses can also be stimulated by narratives across media. However, the interactive nature of the *Karen* app is more likely to strongly encourage parasocial interaction with Karen because of the way it put readers in a sustained, intimate dialogue with her (cf. Giles 2002: 295).

#### *Long-Term Engagement and "Ontological Resonance"*

In Brown's definition of parasocial interaction, quoted above, he notes that the parasocial "relationships with a mediated persona [develop] both during and after media consumption" (Brown 2015: 275). The longevity of parasocial responses to Karen is apparent in the two datasets. Some of the five-star reviews in particular show readers feeling responsible for their actions beyond contact with the app and/or enjoying feeling as though they have a relationship with Karen. One such review, entitled "Brilliant and emotive," states that *Karen* is a "great app" but admits "still got a few twinges of guilt!" (AR20). Like Laura in the reading group data above, therefore, this automimetic response signals that the reader feels responsible for the way in which they behaved in the app. Another review entitled "Love this" reads: "Karen is a great example of 21st century theatre... even if she's not talking to me at the moment" (AR41). In this case, the reader moves from a synthetic appraisal of the app's strengths as a dramatic experience to a parasocial response which implies that they are still in a relationship with Karen, albeit one in which Karen is dictating the terms. Another review reads, "Karen, Karen, Karen – I love you, and one day I'll choose the right in-game options to make you love me too" (AR47). In this parasocial and medial response, the reader addresses Karen directly to explicitly proclaim their love for her. Thus, while they also acknowledge the medium-specific context on which their interaction with her depends, their review implies that Karen still exists.

Data from reading Group A also show evidence of this extended parasocial interaction and associated parasocial response. Laura, for example, who largely took an “authentic” position, reports that her connection to the storyworld continued in between episodes, remarking that “I was sort of thinking about it in between actually”, with fellow group member Annie also agreeing (A, 314–5). Others in the same reading group reported talking to Karen when they were not interacting with the app:

*Nancy:* Yeah, ‘cause I mean when I’m at work I’m like – //Karen, come on (hahahaha)

*Annie:* // (hahahahaha)

*Kim:* You not bothered about me anymore?

(A, 390–3)

In this playful exchange of authentic responses, Nancy anticipates the video call from Karen and, as in the review above, Kim uses the second-person “you” to address Karen, joking about being rejected by her as though she still exists.

Kuzmičová et al. (2020) propose the term “long-term immersion” to account for “fiction-induced experience ranging from scattered reflections on past and future plot or character development, to brief flashbacks of mental imagery, to effects as subtle as indistinct moods invoked by the overall qualities of a given book” (343). They suggest that reading from mobile phones “may be exceptionally suited for maintaining long-term immersion” (343) because they assume that “the mobile device is always available” (344) and thus they can be “constantly re-establishing contact with the fictional stimulus” (344). While Kuzmičová et al. focus on “the reading of ... traditional continuous linear text, presented either in a self-contained file or online” (335) as opposed to born digital fiction of the type examined in this book, their observations about regular contact with the fictional stimulus are clearly relevant to readers’ experiences of *Karen* as a serialised narrative. However, while long-term immersion can account for reader reflections about a narrative, this concept does not account for sustained parasocial responses, and particularly instances where the ontological status of Karen is ambiguous.

As also shown in Nancy and Kim’s exchange above about their relationship with Karen in between episodes, Group A ended their discussion by talking about their feelings for Karen now that the entire narrative was over. Nancy declares that she “felt a whole host of emotions, if I’m being really honest” (1376–7) but she also tentatively admits: “I miss her hahaha” (1379). The rest of the group then respond to positively reinforce this admission with “yes” responses and associated laughter. The language used by Nancy is particularly revealing about the enduring nature of her parasocial response and the ontological status of Karen. She notes using

the past tense that she “felt a whole host of emotions” when she was interacting with the app, but she then shifts temporally into the present tense, using “miss” to describe the way she feels now. The use of the simple past here implies that the feeling persists even though the serial is finished. Significantly, however, it also implies that Karen still exists somewhere. In this case, it is the relationship that is gone, not Karen. Other participants concur enthusiastically with this sentiment, indicating that they also share the same parasocial response.

The parasocial interactions that are formed with Karen are achieved because the app implies that a regular channel of communication has been established between the actual world and the storyworld. This is inextricably linked to the fact that the experience takes place on the reader’s smartphone and thus a device that already belongs to them and on which they will also talk to actual-world individuals such as friends, colleagues, or even life coaches. Thus, the Karen app is phenomenologically anchored to an object that already belongs to the reader. Group A discuss the significance of the smartphone explicitly:

*Nancy:* But do you think the phone thing as well makes it more personal?

*Heather:* Yeah

*Annie:* ’Cause it’s kind of – //it’s just me and her

*Laura:* //Yeah, yeah

*Nancy:* So it’s your kind of relationship with – with her on your phone, so it does feel a lot more personal

*Annie:* Yeah

*Annie:* Yeah, //definitely

(A, 431–8)

Nancy notes the interpersonal effect of experiencing Karen on her own phone, comparatively describing it as “a lot more personal”. Annie also recognises the intimacy that is generated by the one-to-one nature of the interaction, and Annie and Laura agree. Their discussion shows how the readers perceive their smartphone as an object through which they engage in personal communication of the type they also experience in their dialogues with Karen. As Vincent (2005) shows in her examination of the relationship between individuals and their mobile phones, people develop an emotional attachment “with the content it [their phone] enables, the relationships it maintains” (103) such that “the use of mobile phones strengthens and deepens this emotional attachment” (103). This connection is so strong, Vincent argues, that the phone becomes an “emotional device” (103). As the responses above suggest, when readers use their phone to communicate with Karen, the emotional charge of the material



device remains. Their phones implicitly act as an emotional bridge, ontologically connecting them with Karen.

Yet, while the medium-specific nature of the experience can make it feel authentic, that alone is not sufficient for establishing a connection with Karen. The analysis in this chapter so far has shown the role that emotional immersion – that is, “subjective reactions to characters and judgments of their behaviour ..., emotions felt for others ..., emotions felt for oneself” (Ryan 2015: 108; see Chapters 4 and 6) – plays in establishing a connection between the reader and Karen, whether that is short or long term. Authentics and some willing role-players feel emotionally immersed, if only temporarily, and this allows them to form a relationship with Karen in ways that the rejecters cannot. In addition to emotional immersion, some readers use language which suggests they have also experienced spatiotemporal immersion, “a sense of being present on the scene of the represented events” (Ryan 2001: 122) and/or “the experience of being transported onto the narrative scene” (Ryan 2015: 99; see Chapter 4). App-store reviews include: “You are drawn into a relationship with Karen” (GR2, 5 stars), “You get completely drawn in” (AR14, 5 stars), and “Draws you in to a cringe inducing level” (AR42, 4 stars). In the reading group data, one reader sums up her enjoyable experience of the app by stating that “it does kinda pull you in” (Nancy, A, 1284–6). In these positive evaluations of the experience, various grammatical forms of the phrasal verbs “draw in” and “pull in” are used to describe the experience. The storyworld as a magnet metaphor is evident, implying that the storyworld and/or the protagonist is an irresistible force that pulls the reader into its field. Rather than readers willingly psychologically projecting into the storyworld, therefore, they are instead compelled to become part of it.

In addition to the centrifugal force that applies to some readers, two participants from two different reading groups explicitly remarked on the way in which Karen and/or the fictional world appeared to come into the actual world. In Group C:

Jennifer: It felt like – it was interfering in my life, and I read for reasons to take myself out of my life ... To relax and this didn’t allow me to do any of those things um and uh yeah as – I’d agree like – it felt as if it was almost inveigling into my life

(C, 119-23)

Jennifer explains that while she normally reads as a form of escapism – to “take myself out of my life” and, by implication, to travel to another world – the *Karen* app “didn’t allow” her to do that. She explicitly attributes responsibility to the app itself for “interfering” and “inveigling” which are verbs which imply an undesirable presence of something from the storyworld.

In an evaluation of the Karen app towards the very end of their discussion, Group A note a similar feeling:

*Kim:* It came into your life

*Nancy:* Yes

*Annie:* Yeah, whether you liked her or not

(A, 1488–90)

Kim uses the spatial deictic verb “came”, which indicates that the actual world forms the proximal centre of her experience with “it” – a pronoun which refers to the experience as a whole – moving into that domain. Nancy and Annie both agree with Annie noting that Karen’s presence was non-negotiable. Significantly, both Jennifer and Kim use the prepositions “in” and “into” which both invoke life as container metaphors. This conceptualisation implies that their lives represent a physical space that other entities – a fictional character or a narrative experience in this case – can also occupy. Notably, both examples of metaphor show that the intrusive experience occurred in the past so that participants no longer feel, at the moment of reporting, as though Karen is involved in their lives.

While the analyses so far show readers’ appraisal of the app’s ontological effects in general, in the following example, Heather recounts a particular episode in which she remembers feeling that Karen had inappropriately intruded:

*Heather:* //The ... one time where that was weird actually was – the only time I did it with um [name of partner] in the room was it was late and I was sat in bed doing it and that was the time when she said, oh are you alone, and I was like ooh

*Annie:* Is that when she asks you if you’re thinking about her?

*Heather:* Yeah, something like that and I was

*Annie:* Was that the weird sex question?

*Laura:* //No, that’s like really early on

*Heather:* //I thought no I’m not alone, but I thought well, I wish I’d have known you were gonna ask that, and then I would’ve been – it felt really like – it felt like somebody was prying on something

*Laura:* //Yeah

(A, 439–50)

Heather reports that she experienced this interaction with Karen in her bedroom, with her partner present late at night. She recalls her initial reaction as “I was like ooh”, which implies a sense of anticipation, but her subsequent use of the verb “prying” implies that she felt Karen was too

closely involved and therefore the interaction was inappropriate. Heather's ultimate discomfort is related to the fact that Karen had been present in her personal space and thus in her actual world. The experience had ultimately made her feel "weird".

As the preceding analysis shows, some readers of *Karen* feel as though Karen has entered their lives during, in between, and after exposure to the app, as though the actual and fictional worlds have merged, and this is a feeling that can linger. Bell (2021) observes the cognitive effects of digital storyworlds, such as *Karen*, that play with the boundary between reality and fiction. She defines "ontological resonance" as "a phenomenon in which reading/viewing/playing a fictional work can result in a prolonged response and aura of significance, which is generated by perceived bidirectional ontological transfers between the actual world and a storyworld both during and after the experience" (431). The term "resonance" accounts for the way in which each world appears to blend into the other; readers are transported into a storyworld but, because they return to the actual world bringing the ontological authenticity of the experience with them, elements of the experience are transferred back. The concept acknowledges the part that transportation and thus immersion plays in generating resonance, because readers have to be transported into a world in order for elements of it to be brought back into the actual world. It recognises not just the blurring of fiction and reality that can happen in texts that play with the boundary between reality and fiction but also the prolonged felt effects of those ontologically transgressive texts. The theory recognises that ontological resonance may reduce over time and, thus, while readers of *Karen* may feel as though Karen is real while reading, in between episodes and afterwards, this feeling can degenerate. Evidence of this degeneration can be seen in the reading group data above when participants use past tense verbs in relation to the container metaphors, which implies that the ontological resonance occurred in the past.

#### *Data Sharing and the Ontological Status of the App*

While the preceding section shows how some readers enjoyed or were at least intrigued by the way in which Karen came into their lives, others were suspicious of it and/or felt that it was ethically questionable. Access to sensitive data was a concern for some readers, particularly amongst the groups who did not like the app. In Group C, for example, whose participants largely adopted a rejecter position for most of the discussion, Debbie states that she was "very suspicious about what was happening with the data, um because potentially you were giving private information into a machine, and you've no idea what then is happening" (C, 31–3). The conversation about data re-emerged towards the end of the group's discussion:

- Tracey:* I mean, the other thing that I think uh [Debbie] raised earlier was um the fact that um I was entering into it expecting to um participate uh truthfully as the questions came along and after about the third question, I thought there's no chance I'm sharing any more
- Jennifer:* //No, yeah
- Tracey:* //Of myself because where is this thing stored?
- Debbie:* Yeah, yeah
- Tracey:* How is it being collated? ... And how would it be used in the future because
- Debbie:* //Yes
- Tracey:* //They actually have my IP address here
- (C, 503–14)

Tracey and Debbie both voice significant concerns about how their answers to the multiple-choice and free-text questions would be used and by whom. Tracey even suggests that the app might link her answers to her IP address and links this with other data that she has given online elsewhere. In these medial responses, the readers engage with privacy issues relating to digital media specifically. Tracey subsequently reveals “I thought well I’m going to lie, so I thought I’ll start to play a bit of a part” (C, 519). She thus assumes a reluctant role-player position in order to avoid contributing genuine information about herself.

Tracey also explains during the discussion why she found the process so uncomfortable: “I felt as if it was um – they were being voyeuristic to my um contribution, as opposed to it being um me looking in on a novel or some kind of fictional account of people’s lives” (C, 88–90). Her conceptualisation of reading as “looking in on a novel” suggests that she prefers to be positioned outside of a storyworld as opposed to being part of it. The idea of reading as transportation is thus implicitly rejected in favour of wanting to experience the storyworld from an external perspective. Her concern that “they were being voyeuristic” also suggests that she is wary of the developers’ motives.

While some readers were suspicious of information sharing, others felt that the app was ethically questionable because of the way that Karen positioned herself as a professional life coach:

- Debbie:* I found because she set herself up as a life coach and then she was so unprofessional and unethical, so the other thing I did was say that I couldn’t form relationships with people and I always saw things being very dark, and then the comment that came back was, okay then Sylvia Plath
- Jennifer:* (hahaha)

- Debbie: But then joke  
 Tracey: //Mm  
 Debbie: //And I thought well, if that really was me  
 Jennifer: Yes  
 Debbie: How dangerous is that?  
 Tracey: Mm  
 Debbie: That's really dangerous  
 Jennifer: Yeah, it's – yeah  
 Debbie: Yeah, and completely in - inappropriate, and you know, people who are in those kinds of roles work to a code of ethics and then it just became so unethical it was untrue and it would be one thing to read about those things, but it's quite another thing to kind of be expected to be almost in a relationship with them, you know, so I didn't enjoy it at all.  
 (C, 43–60)

Debbie recounts a particular episode of the app in which she selected multiple-choice answers that indicated that she found it hard to form relationships and that she has a tendency towards pessimism. She recalls Karen's response as comparing her to Sylvia Plath, presumably because of the depression that Plath is commonly thought to have experienced. Jennifer initially laughs at this association before coalescing to Debbie's view that this could be "dangerous" because of the triggering effect that it might have on someone who was genuinely feeling "very dark".

In Group D, Mae also asks the group members to consider the potential ramifications of the app: "Do you think if you were (2) um – yeah, if you were feeling vulnerable at the time of doing this, it could – it could have quite – it could have quite a strong reaction in you?" (D, 837–8). David responds that "certainly if you had personal experiences which were similar to what we were observing" (D, 840–1) and Linda that "there was a sense of being let down, because there was – it did establish an expectation ... at the beginning ... that it was going to be your – that she was going to be your life coach" (843–8). Group C and D's mimetic responses suggest that Karen's characterisation as a life coach is perhaps too close for comfort because of the way in which she is set up as but ultimately fails at being a life coach. Her ineptitude is thus seen as something that could be a cause for concern in the actual world as opposed to being confined to the storyworld.

Some app-store reviews explicitly warn readers about the potential ramifications of *Karen*: "If you actually have life issues DO NOT use this app. It gets so bad that the 'life coach' actually demeans your answers, accuses you of lying to her, etc. ... There was one session when she literally hangs up,

then one where she's going on about how she thought we had something, which also ended abruptly" (GR14). In this mimetic response, the reviewer explains what readers can expect from the app in terms of Karen's approach as a life coach. The warning is emphasised using capitalisation (cf. Tannen 2013), implying urgency, seriousness, and emotional investment.

While this warning might seem unnecessary for an app classed as "entertainment", one review confirms that some people have misunderstood the nature of *Karen*: "I thought this was going to be a life coaching program" (GR9). Another relatively lengthy review explains how it negatively impacted someone's mental health quite severely:

This is a cool concept, kudos to Blast Theory for pulling something like this off, but for me it was a horrible experience playing the game – much as I wanted to like it. [...] I [...] had to stop without completing because it was having a negative impact on my mental health: [...] I actually wasn't in the right space to be drawn into an abusive relationship like this. And believe me, you do form a relationship with Karen. Of course I know Karen isn't a real life coach but due in part to the quality of her acting, playing this app was actually having a negative effect on my mental health. Being insulted within a question or two didn't help, and it did feel like the multiple-choice sections weren't evaluated very carefully so that you could actually make a choice that was in character, but I persisted much longer than was healthy for myself. Maybe later I'll be able to play all the way through and amend this review, but that isn't yet possible. This app needs trigger warnings.

(AR40)

In this very candid automimetic response, the reviewer explains why they believe the app affected them adversely. Partly this is because they feel they were not "in the right space" and thus their then current disposition was not conducive to a positive experience. However, the review also demonstrates that it is because of the textual features at work in the app. Primarily, this relates to how their contributions were treated (e.g., "it did feel like the multiple-choice sections weren't evaluated very carefully") and the way that Karen acted (e.g., they felt "insulted" and part of "an abusive relationship"). However, these effects were felt so strongly because they were "drawn in" and "formed a relationship with Karen", despite knowing that "Karen isn't a real life coach". The parasocial relationship that this reviewer formed with Karen and the resulting ontological resonance that was felt was thus the cause of their negative experience. The fact that they advise that "this app needs trigger warnings" reflects the severity of their reaction.

### The Ethics of Ontological Ambiguity

The preceding analyses show that the combination of the potentially credible textual features coupled with Karen's inability to fulfil her life-coaching responsibilities make the experience feel both real and fictional at the same time for some readers, leading in some cases to parasocial responses and even "ontological resonance" (Bell 2021). Irrespective of whether readers adopted an authentic, role-player, or rejecter position, the ethics of the *Karen* app often formed an explicit or implicit part of the reader responses.

The ethics of interactive digital narratives have been investigated in relation to certain types of videogames, including circumstances in which player-characters are violent towards other characters in the gameworld (e.g., Hartmann & Vorderer 2010) or in which they are asked to make a morally pertinent choice (e.g., Ferchaud & Oliver 2019). However, the ethical issues raised in the datasets above relate not only to the way that Karen is treated by the reader but also to the effect of the narrative – and the reader's role within it – on the readers themselves.

In the context of literary print fiction, Phelan (2005) proposes four "ethical situations" that influence the ethical position of the reader relative to a narrative:

- 1 the characters within the storyworld; how they behave and judge others ...;
- 2 the narrator in relation to the telling, to the told, and to the audience ...;
- 3 the implied author in relation to the telling, to the told, and to the authorial audience; the implied author's choices to adopt one narrative strategy rather than another will affect the audience's ethical response to the characters; each choice will also convey the author's attitudes towards the audience;
- 4 the flesh-and-blood reader in relation to the set of values, beliefs, and locations operating in situations 1–3 (23).

Ontologically, situations 1 and 2 reflect elements in the storyworld, with situation 4 relating to the reader in the actual world. Situation 3 shows how readers' interpretation of the implied author's choices "convey the author's attitude toward the audience". Phelan defines the implied author as "the streamlined version of the real author responsible for the construction of the text" (5) which could suggest that they are located in the actual world. However, Phelan stresses that the implied author is a "construction by the real author" (45), which shows that he perceives it as a textual construct in his conceptualisation. The flesh-and-blood author does not appear in Phelan's model above. However, as his definition of "implied author" shows, there is an inevitable epistemological and ontological relationship

between the “implied author” in the storyworld and a flesh-and-blood author who is ultimately located in the actual world. Analysing how the four situations above “dynamic[ally] interact” (23) in print fiction, Phelan shows how ethical positions can be generated by a text.

It is important to note that Phelan’s model forms part of his broader rhetorical approach to narrative, in which he is “concerned with the multilayered communications that authors of narrative offer their audiences” (5), including the relationships between characters, narrators, implied authors, authorial and narrative audiences, and flesh-and-blood readers. While narrative communication models are still being debated within narratology across media (e.g., Chatman 1980, Richardson 2011, Dawson 2013, Shen 2013, Punday 2019), Phelan’s approach, including his communication model, links “the cognitive (what do we understand and how do we understand it?); the emotive (what do we feel and how do those feelings come about?); and the ethical (what are we asked to value in these stories, how do these judgements come about, and how do we respond to being invited to take on these values and make these judgements?)” (ix). It thus recognises the centrality of ethics to narrative fiction, and provides a means of analysing the elements of a text that can, hypothetically, generate an ethical response.

Despite the methodological benefits of Phelan’s approach, his model is purely theoretical in so far as he does not derive it from or apply it to reader-response data. However, our reader data above show evidence of the situations dynamically interacting and thus demonstrates how his model can be operationalised empirically (cf. Nuttall 2017). The flesh-and-blood reader position in relation to situations 1 and 2 can be seen in the form of readers’ judgements about Karen as a character and as the narrator of her own tales. This includes readers’ assessment of Karen’s behaviour towards other characters as well as her role as the reader’s life coach. This position will be influenced by whether readers form a parasocial relationship with Karen or not.

Readers’ concerns about the ontologically ambiguous nature of the app demonstrate situation 3. This includes discussions and reviews in which readers reflect on the ethics of a fictional app that pretends to be a real life-coaching app, including feelings of being “let down” and/or potentially traumatised by this strategy. In terms of the ontological nature of the implied author, the AR40 review above refers to “Blast Theory” and thus names an artistic collective. Linda’s use of “it” also implies she is talking about the app without attribution to a maker. We might therefore see the “implied author” as an “implied author/developer” in this case, recognising that this figure is both the creator of the narrative and the programmer of the code. With this medium-specific modification, Phelan’s situation 3 can be used to show that readers are concerned with the ethics of the creator(s) of the app, whoever they actually believe that to be.



Yet, while Phelan's ethical position framework can account for some of the ethical positions in the data above, it cannot yet account for them all. First, because the reader of *Karen* must answer multiple-choice questions which influence the narrative, they have a more active role in the text than readers of non-participatory narratives. As the analysis of reader constructions above shows, some of the reader's choices influence Karen's destiny in the storyworld, and some "authentic" in particular felt a moral responsibility for that in the actual world. Phelan's situation 4 – the "flesh-and-blood reader's position in relation to the set of values, beliefs, and locations operating in situations 1–3" – must therefore be modified to account for the reader's participatory role in the fiction.

Crucial to the first modifications to the model is an appraisal of Phelan's reader "position", which he defines as a "concept that combines being placed in and acting from an ethical location" (23). Since he develops the model from and applies it to linear print fiction only, the meaning of "acting" in this case is limited to what Manovich (2001) defines as a "psychological interaction" with a text only which comprises cognitive processes as opposed to "physical interaction" of users of digital media which include material interaction such as pressing buttons, clicking links, etc. (57). Since in linear print fiction, readers may adopt a psychological position relative to the characters', narrator's, or author's values, beliefs, and locations, they do not adopt any of these roles themselves. Phelan's framework thus currently only emphasises the reader's psychological position in relation to their assessment of and stance towards the characters', narrator's, and implied author's ethical position only, as opposed to the reader's ethical position in relation to their physical interactions with and thus role within a narrative. In interactive fictions such as *Karen*, however, the reader must adopt two positions related to their psychological and physical interaction with the text. One position is the same ethical position as in Phelan's original situation 4, in which they take a position relative to a character, narrator, or implied author. This includes Karen and the other characters, but it also includes the reader-as-a-character in the storyworld because the reader's contributions change the nature of the narrative in that storyworld, irrespective of the authentic, role-player, or rejecter position they assume. The other ethical position relates to the implications of their participatory role in the fiction but as a reader located in the actual world. As the analysis above has shown, authentic, role-players, and rejecters took an ethical position relative to their participatory role. This includes David feeling that the reader is put "in quite a difficult situation" and Laura feeling "responsible" for Karen. Their contributions influence the storyworld, but they also have implications for how readers feel about those decisions in the actual world.

To account for the ethics of the reader's interactive role in *Karen*, Phelan's model must therefore also contain a situation for "the flesh-and-blood

reader's contributions to the narrative". This addition allows the model to distinguish between the reader's ethical position in relation to characters (including themselves), narrator, and implied author/developer – as applied to all other narrative media – and their ethical assessment of their contributions from a position of agency in the actual world. The latter is a medium-specific facet of ergodic media including digital fiction because it relates to the way that a reader assesses the implications that their decisions in the actual world have in the storyworld. Adding "the flesh-and-blood reader's contributions to the narrative" is thus distinct from Phelan's original situation 4 because it relates specifically to readers' contributions which originate in the actual world as opposed to their set of values, beliefs, and locations towards characters in the storyworld (which may also include the fictionalised version of themselves). Just like the doubly deictic "you" analysed in Chapter 2, in which the second person refers both to the reader in the actual world and a character in the storyworld, therefore, the reader can occupy these two ethical positions simultaneously and be ethically doubly situated.

The second modification that we propose captures readers' concerns about how their contributions to the storyworld might be used. As shown above, some readers were concerned about how their contributions affected Karen in the storyworld but also how their responses and thus the data that they contributed to the app would be managed in the actual world after they had contributed those responses. This includes worries about IP addresses being tracked and reader responses being "collated" and "stored". Such concerns about their responses are made prominent at the end of *Karen* because, as mentioned in the introduction to this chapter, once the narrative is over readers can opt to buy a "personalised report" which is compiled using the data the reader has supplied. As Blast Theory explain on the *Karen* website, "your report shows how you behaved and how the decisions you made affected Karen. You get to compare yourself with other participants and to see how the science of psychological profiling underpins the story" (Blast Theory n.d.). Thus, the instructions explicitly state that data will be collected and thus potentially prime readers to question the ethics of this feature. To account for the ethical concerns about the way that reader data might be used, we add "the implied author/developer's use of the flesh-and-blood reader's contributions to the storyworld" to the model.

The two new categories result in a new model of ethical positioning that can account for the interactive mediality of digital fiction as follows:

- 1 the characters within the storyworld; how they behave and judge others ...;
- 2 the narrator in relation to the telling, to the told, and to the audience ...;

- 3 the implied author in relation to the telling, to the told, and to the authorial audience; the implied author's choices to adopt one narrative strategy rather than another will affect the audience's ethical response to the characters; each choice will also convey the author's attitudes towards the audience;
- 4 the flesh-and-blood reader's contributions to the narrative;
- 5 the implied author/developer's use of situation (4);
- 6 the flesh-and-blood reader in relation to the set of values, beliefs, and locations operating in situations 1–5.

In addition to the two new categories of situations 4 and 5, situation 6 takes account of the fact that readers take an ethical position relative to their contributions to the narrative and the author's use of those contributions. From a methodological perspective, the addition of situations 4 and 5 makes the ethical situation model transmedial by extending its use to texts that invite what we define, drawing partly on Manovich's (2001) terms above, as both psychological and participatory ethical positioning. Non-interactive narratives such as those found in most print literature, films, and television result in ethical situations that are already reflected in Phelan's original model because the reader's ethical position is not influenced by their contributions to the narrative. Conversely, what we call participatory ethical positioning occurs when a reader's participation in and/or contribution to a narrative actively influences that narrative and thus their ethical position relative to this role. This occurs in *Karen* but also in all other digital fictions in which the reader contributes to the storyworld. In addition, participatory ethical positioning also applies to other interactive media such as videogames (cf. Sicart 2009), live action role-playing games (LARP) (cf. Järvelä 2012), immersive theatre (cf. Frieze 2016: 135–202), and, less common but equally relevant, choose-your-own-adventure print fiction (e.g., from Bantam Books), and interactive television shows (e.g., Netflix's *Bandersnatch*; cf. McSweeney and Joy 2019), in which the reader/player/viewer has an active role in the construction of the narrative.

The addition of the “the implied author/developer's use of situation 4” allows the model to account for the way that reader contributions are handled in the actual world. This addition to the model could hypothetically relate to how reader contributions are handled in relation to any interactive media. However, this ethical situation is likely to be more pronounced within the context of digital media because a reader's ethical position relative to their contributions is likely to be influenced by their knowledge and experiences of data use and abuse online specifically. Reader data is sometimes exploited in the actual world, and the concerns in the reader data about how their data will be used show that they have

genuine concerns about that possibility. The medium-specificity of the digital reading context will thus encourage this ethical position.

Applying the new ethical situations to the *Karen* data, the flesh-and-blood reader's contributions to the storyworld are reflected throughout the data as readers reflect on how their contributions made them feel and, in turn, whether they were ethical. Some authenticers felt this keenly, while some willing role-players used the experience to experiment with ethical positions. Some "rejecters" disliked the participatory nature of the app on the basis that it was unethical and thus interacted with it only because they had to. Readers' mistrust of how their contributions to the storyworld might be used in the actual world, as manifested in some of the discussions about data and privacy, reflect situation 5. While the model focuses on the ethics of fiction across the various roles (reader, narrator, character, implied author/developer), it also shows the fundamental relationship between ontological ambiguity and the ethics of fiction. *Karen* plays with the boundary between reality and fiction narratologically and medially. While that can be an enjoyable experience for some, for others it is ethically problematic if not reprehensible.

## Conclusion

This chapter has shown the fundamental connection between participatory, interactive app fiction and the ethics of fictional narratives. The analysis of reader constructions has demonstrated how participants in both the reading groups and the online reviews focussed largely on medial and (auto) mimetic responses to *Karen* – as opposed to thematic or synthetic responses – and specifically the ways that the digitally mediated experience felt real even though (most) readers knew it was not. The combination of the potentially credible textual features coupled with *Karen*'s inability to fulfil her life-coaching responsibilities caused that ontological ambiguity. However, readers also focussed on the extent to which their involvement in the fiction, via second-person address and their associated participatory responses, reflected them accurately – that is, whether it was automimetic.

Applying and refining the model of reader positioning developed in Chapters 2 and 3, we have shown four positions that can be observed across the data: authenticers, willing and unwilling role-players, and rejecters. The new medium-conscious model of ethical positioning that we offer also accounts for the mimetic, medial, and what we newly defined as "para-social responses" to *Karen* from authenticers, role-players, and rejecters. We expanded Phelan's (2005) ethical response model to include readers' contributions to a storyworld and authors' use of reader contributions. We have thereby adapted and empirically operationalised the original model to account for reader responses to interactive, participatory narratives.

The analysis reveals that some authentic and willing role-players enjoyed feeling that Karen was uncannily real, forming a parasocial relationship with her, participating in and influencing the narrative, experiencing “ontological resonance” (Bell 2021), and pretending that they were being life-coached or were life coaching someone else. Rejecters and reluctant role-players, on the other hand, disliked one or more of these aspects because they found the ontological intrusion uncomfortable and ultimately unethical.

While *Karen's* invocation of the reader is relatively unique, it is also based on familiar conventions of online communication. Readers were able to form a parasocial relationship with the protagonist because the experience felt real to them. Their concerns about the ethics of the app are similarly based on concerns about the authentic feel of the app and the medial affordances of mobile, participatory technology. The reader's relationship with and positioning in the storyworld is particularly important in this regard because as Dechering and Bakkes (2018) note with regard to interactive narrative games more generally, “ethical agency will be facilitated if a game world presents an environment (or content) of which a specific player may derive meaning” (2). Without this, they suggest, a player can distance themselves from their behaviour, justifying their actions as “meaningless or in jest” (2). In *Karen*, readers align their experience with the materialities of digital media afforded by mobile technologies that operate as cyborgian extensions to readers' bodies and embodied lives. They notice that their contributions have implications for the storyworld and the actual world but also that there is an inevitable connection between the two that digital technology can enable, conceal, and problematise.

## Notes

- 1 Following Driscoll and Rehberg Sedo (2018), we

recogniz[e] that reviewers most likely did not expect their reviews to be aggregated and studied. .... We consider these publicly visible reviews to be acts of communication available for analysis; at the same time, we attempt to protect the reviewers' privacy by not citing their usernames when we quote reviews. (250–51)

All data were thus anonymised with pseudonyms given.

- 2 The prefix GR stands for Google Review and AR for Apple Review. The numbers refer to the pseudonym given to the reviewer. The full dataset is available at: <http://doi.org/10.17032/shu-180031>
- 3 Letters refer to the groups and associated transcripts and numbers to the line number(s) in the respective transcript. The data from this study can be accessed at: <http://doi.org/10.17032/shu-180031>

# 6 Orientation and Empathy in VR Fiction

## Introduction

The previous chapter considered ways in which the actual world can become merged with a born-digital storyworld to the extent that the difference between them can become ambiguous. In the final analysis chapter of this book, we turn to what is possibly the most phenomenologically complex and emergent storytelling medium of our time: Virtual Reality (VR). VR storytelling – fictional and non-fictional – allows the construction and experience of alternative and often multiple universes in a highly embodied, spatialised, and sensorily immersive way. These experiential qualities are afforded by a combination of medium-specific parameters. Not only do VR environments allow the kind of highly multimodal, multimedial, spatialised interactive experiences we know from 3D immersive games, they create the illusion of full, embodied presence. Users wear head-mounted devices such as Meta Quest, HTC Vive and Valve Index, which contain a stereoscopic display with separate screens for each eye, 360-degree head motion-tracking sensors, and stereo sound. The head-tracking functionality adapts the user's focus to the in-world surroundings with minimal latency, thus simulating a real-life field of vision. VR equipment typically comes with two controllers, one for each hand, which are represented as the first-person avatar's hands in-world. Users are therefore encouraged to perceive themselves as present and re-embodied in the projected space, although, with the exception of the hands, their bodies tend not to be visible.

This chapter shows that while VR is a nascent storytelling medium that is under-researched, it can transform embodied narrativity. Studying VR reading through qualitative methods can help us refine and qualify existing theories of narrative across media. Simultaneously, we recognise that VR's medial qualities are such that we must refrain from deterministic views of its affordances and instead consider the precise aesthetic qualities of

individual works in empirical research. We show, through an analysis of data from a qualitative study, that reading in VR is a multiply contingent and multidimensional concept, and that VR does not yield monolithically or universally empathic experiences. In doing so, we offer unique insights into the qualitative aspects of these contingencies and dimensions that transcend and qualify existing research.

We begin by critically exploring VR and its medium-specific phenomenological qualities. We then critically engage with the fraught concept of character empathy in fiction more generally and in relation to VR fiction specifically, drawing on Shen's (2010) typology of affective, cognitive, and associative state empathy. We show how our case-study text, Randall Okita's VR memoir, *The Book of Distance* (2020) (henceforth *TBoD*), exhibits textual features associated with the genre of autofiction, and specifically allofiction, and suggest that it represents a medium-specific form of this genre. We then examine the results of 15 semi-structured post-play interview responses to *TBoD*, paying attention to the way that readers orientate to this relatively new form of narrative fiction. We show how reader responses are significantly impacted by the mediality of the reading experience in VR. In particular, readers construct their aesthetic experience retrospectively through personalised intermedial references. These constructions are symptomatic of how the material and embodied affordances of the technological environment and the aesthetic design cue comparative and contrastive processes. The data thus convey how readers' understanding and appreciation of the story are shaped by the media and genre frames invoked. We also demonstrate how, in readers' cognitive constructions, VR narrativity is constituted through the frames of older technologies as well as neologistic processes of frame blending (Schank and Abelson 1977; Turner 1996). These frames reach beyond the descriptors used by the author, the production team, and existing scholarship on the work under investigation.

We subsequently examine the implications of spatial design in VR for various narrative roles. Our data overwhelmingly show that the represented spaces in *TBoD* caused our participants to orient themselves as intradiegetic or diegetic entities in-world, as shifting between ontological roles and spaces, or indeed as "present in absence". We introduce the new concept of *medium-specific spatial double-deixis* to explain these partly paradoxical effects and how they are evoked. Our research further shows that theories of the narrator and narratee need to be adjusted to medium-specific spatiality in VR. We analyse how the simulated co-presence with the narrating, fictionalised author in *TBoD* cause readers to conflate narrator and author, as well as narratee and reader, in a process that we define as *metafictional embodied metalepsis*, which we argue is an autofictional, medium-specific device.

We then move to examining the way that readers empathise or not with the characters in *TBoD*. Our data show that different readers empathised with different characters depending on their own personal histories and cultural schemas. We also demonstrate how our data confirm recent scientific models of empathy as a spectrum of affective states rather than an absolute concept, and we show that readers' discursive constructions of empathy and other affective responses can be more static or more dynamic. Our data further suggest that, in the context of VR fiction, the empathy spectrum concept needs to be expanded by adding a key reflexive, meta-cognitive, and metafictional component. We argue that existing theories of character empathy across media need to be refined with respect to the choice of target character(s), and that a distinction needs to be drawn between cognitive and affective salience (memory and care) in relation to individual characters and readers' stances towards them.

Overall, the research presented in this chapter addresses an important gap in the theory of narrative empathy, which has traditionally focused on print fiction, film, non-fiction, and theatre and largely disregarded digital-born fiction and narrative games. Furthermore, existing research on narrative VR has not been able to show conclusively how qualitative details in narrative and aesthetic design impact empathy and other aspects of character comprehension and processing. Empirical empathy research is only beginning to enter the territory of transmedial and medium-conscious narratology, and our research takes a decisive step towards addressing this lacuna.

### Empathy and Narrative VR

Over the past decade, VR has become a key mode of engagement in digital media. It has grown particularly strongly in areas of commercial gaming, electronic arts, digital training and education and various types of physiological and cognitive therapy (Evans 2019). This is mainly because of its immersive, re-embodying qualities that can simulate environments, (im)material processes, and social interactions in highly realistic, sensorily rich and memorable ways (Shin 2018; Fonseca & Kraus 2016). In popular science discourse, VR has been hailed as the ultimate “empathy machine” (Milk 2015) because it allows users to “feel psychologically present within a media message” (Slater & Wilbur 1997). In his 2015 Ted Talk, immersive storyteller Chris Milk claimed that, through its heightened projection of embodied presence, VR could make human beings “more compassionate, ... more empathetic and ... more connected” than through any other medium, potentially leading to actual behaviour change and ultimately making us “more human”. However plausible this “rhetoric of empathy” might appear *prima facie*, deploying it uncritically in promotional



VR discourses has been criticised as “reductive, deterministic, and ... very plausibly driven by ulterior motives” (Murphy 2022: 489).

The promotionally functionalised empathy machine hypothesis assumes a monolithic, absolute, oversimplified, and ultimately ableist notion of VR as a universally enabling, accessible technological environment with uniform design principles. The empathy machine hypothesis, as popularly conceived, disregards important contingencies in individual users (Cummings et al. 2021; Shin 2018; Slater & Sanchez-Vives 2016) that affect their experience in diverse ways. Evidence suggests, for example, that women are more susceptible to VR sickness than men, which has been linked to the fact that women tend to have a wider field of vision than men (e.g., Munafo et al. 2016). These and other material factors show the cultural biases built into VR designs and render them inherently gendered, ableist, and ageist. Thus, cultural and individual differences have a major role to play in the overall experience of VR narratives, and they correlate variably with users’ ability and willingness to develop degrees of empathy and other prosocial affective states.

Theories of empathy proliferate across disciplines in humanities, social, communication and health sciences, with a lack of consensus on how empathy can be defined comprehensively. This is due to the multidimensionality and multifunctionality of the concept. For instance, social and health scientists make a qualitative distinction between cognitive, affective, and associative empathy. Cognitive empathy refers to “the perspective-taking through which one comes to recognize, comprehend, and adopt the viewpoint of others” (Cummings et al. 2021: 4). It thus describes a state of mind that enables individuals to understand – to varying degrees – the complexities and situatedness of their situation and to see things from their point of view. Affective empathy pertains to “one’s personal affective reactions to others’ experiences and expressions” (Cummings et al. 2021: 4), which manifests in emotive responses of sadness, anger, or happiness, for example. Associative empathy can be understood as an extreme, viscerally perceived form of affective empathy that involves a “sense of social bonding with another person” (Cummings et al. 2021: 4) and “can be labelled as identification” (Shen 2010). While different brain structures have been found to account for cognitive and emotive empathy, “every empathic response will evoke both components to some extent” (Shamay-Tsoory et al. 2009), rendering them mutually interdependent (Nathanson 2003).

A distinction made in neuroscientific research is between trait and state empathy. Trait empathy refers to an inherent, scalable personal quality or ability that “reflects a tendency to feel concern for others, to understand others’ internal states, and to feel congruent emotions with others” (Simon et al. 2021: 280; Decety & Jackson 2004). State empathy is a more contingent affective state activated on cue, through represented or experienced

personal states and situations, where the cognitive “activation of these representations automatically primes or generates the associated automatic and somatic responses” (Preston & de Waal 2002). Both concepts often correlate and can impact one another as individuals, with higher degrees of trait and/or state empathy more likely to develop mental representations of other people’s situations and affective states, and to expose prosocial behaviour (Batson 1991; Rameson et al. 2012).

Recent research in nursing education has proposed that, in the interest of teaching and training, state empathy might be understood more as a continuum than a taxonomy. This continuum, according to Levett-Jones and Cant (2019), can be broken into three main stages: the perceiving stage, the processing stage, and the responding stage. The perceiving stage involves individuals’ resonating with and automatic mirroring of another person’s neural responses (empathic contagion), and it sees individuals developing awareness of their own biases (empathic humility). The processing stage leads from respectful curiosity to perspective-taking and cognitive understanding (roughly equivalent to cognitive empathy); and the responding stage leads to an actual emotional response (affective empathy) with appropriate communicative, prosocial, and self-reflexive action. Levett-Jones and Cant’s continuum is thus conceived as not only scalable but also dynamic, as it lends itself to pragmatic purposes of training and personal development.

Empathy in the theory of narrative is distinctive in that it centres on the cognitive processes involved in audiences’ engagement with narrative fictional and non-fictional environments, focusing on fictional or fictionalised characters rather than real-life people (Keen 2007; see Ryan 2015).<sup>1</sup> Broadly speaking, narrative empathy is a component of a broader range of “narrative feelings” (Kneepkens & Zwaan 1994; Miall & Kuiken 2002) comprising “all feelings toward the narrative world” (Koopman 2015) including self-projection and immersion. We prefer these broader affective notions to the more conventional idea of narrative empathy as “the sharing of feeling and perspective-taking induced by reading, viewing, hearing, or imagining narratives of another’s situation and condition” (Keen 2013). Not only does this latter definition ignore interactive and ludic media like digital fiction but it also assumes that an empathetic reader necessarily “shares” in the sense of replicating or duplicating a character’s feelings. It is important to recognise that the claim to be able to empathise with somebody – fictional or factual – is not only unrealistic, but that, more problematically, it can convey a selfish and/or colonialist stance that places the empathiser in a privileged position vis-à-vis the individual(s) they feel entitled to empathise with (Shuman 2005; Serpell 2019). Bonnie Ruberg (2020) discusses this dilemma in relation to so-called empathy games, a label often attributed to video games that allow players to directly

experience, in first, second, or third person, other people's hardships, such as terminal illness (*That Dragon, Cancer*), wartime suffering (*This War of Mine*), and transgender discrimination (*Dys4ia*). Players may experience a simulation of another person's situation and gain an embodied understanding of its situated complexities and precarities. They might even have a strong emotional response to it, and/or indeed feel reminded of certain aspects of their own lives, which might then lead to viscerally felt, associative empathy and identification. However, the exact same historically and socially situated as well as subjectively embodied cognition cannot be replicated for the reader-player. It can only ever be an "inspiration", with mostly minimal impact on the lives of those whose perspectives and/or suffering we experience (Shuman 2005: 5).

Keen, whose work on narrative empathy has been otherwise extensive and groundbreaking, subsumes both affective (sharing of feeling) and cognitive (perspective-taking or Theory of Mind) aspects of empathy in her concept. Her cognitive theory focuses on ways in which the "narrative poetics" of formal text structures evoke "high levels of imagery inviting mental simulation and immersion", thus linking aspects of immersion and empathy (Keen 2013; see also Shin 2018). Keen (2007, 2013) further separates narrative empathy (feeling *with*) from the related concepts of sympathy (feeling *for*) and empathetic aversion, or personal distress, which commonly leads to disruption or discontinuation of narrative consumption. Thus, while Keen's theory enriches the theory of narrative empathy with key neuroscientific findings and interdisciplinary perspectives, it remains restricted to print media and film, and does not sufficiently question and dismantle the concept itself in critical detail.

An important observation made by various empirical studies based on print fiction is that narrative empathy is contingent upon a variety of factors, including personal experience with the subject matter, genre preferences, prior exposure to literature, as well as individual levels of trait empathy (Bourg 1996; Koopman 2015). Koopman (2015), for example, finds that personal factors appear "more important in evoking empathy than the type of text one reads". Miall (2009) further documents a positive correlation between empathy and presence, or transportation, in print fiction, and this finding has been confirmed and medially expanded by empirical studies on narrative VR. Shin (2018), for example, observes that empathy and presence are empirically discernible affordances of VR experiences, but that empathy is more contingent upon "the disposition of particular users" than presence. Pianzola et al. (2020) report positive effects of VR-induced transportation on reading motivation; and Cummings et al. (2021) show that different dimensions of (psychological) presence, i.e., perceived self-location, sense of co-presence and judgements of social realism, "mediate the effect of immersion on cognitive, affective, and associative

empathy” in a 360° VR news story scenario (1). While the aforementioned studies suggest a relationship between a VR environment and the feelings of presence in that space, Bang and Yildirim’s (2018) study shows that the empathic effects of VR do not necessarily differ from those of a 360°, two-dimensionally rendered YouTube clip. As we show in this chapter, however, Bang and Yildirim’s findings may require further refinement and qualification in light of qualitative data.

Offering a neuroscientific perspective on empathy in relation to fiction, studies have shown links between empathy and mirror neuron activity and specifically a “conspecific’s action to the representation of the motor plan for that action in the observer’s brain” (Woodruff 2018). Miall (2009), for instance, refers to the effects of mirror neurons when it comes to perception, affect and embodied empathy as “feeling *with*” in fictional, imagined scenarios and real-life situations. According to Gallese and Goldmann (1998), mirror neurons facilitate “mind reading”, which means that they help readers to form a “Theory of Mind” of other people and to understand social cognition more broadly. Under this pretext it is plausible that mirror neuron activity is at least partly responsible for the experience of empathy, broadly conceived, and that these effects happen across fictional and real-life scenarios (Iacoboni 2009; Heister 2014).

Another, more recent explanation for empathic responses to storytelling has been offered by neuroscientist Hasson (2017), who found that, under experimental conditions, the storyteller’s and the listeners’ brain responses showed similar fMRI patterns, and that the better the listener’s understanding of the speaker’s story, the stronger the similarity between the listener’s and the speaker’s brains became. This so-called “entrainment” effect was also observed in situations where the respondents were only sharing memories of watching a film rather than those of a real experience. As Pettersson Pecker (2022) argues, entrainment, if used as an explanation of narrative empathy, replaces the selfish connotations of the mirror neuron theory (Shuman 2005) and can “help us better understand the social powers of literature in an individualized society” (Pettersson Pecker 2022). As suggested by the term “entrainment”, aesthetic experiences like reading or interacting with fictional worlds and events involve a sense of “embodied, embedded and enacted ... movement” that puts the audience in a “relational dynamics” with the artwork and allows them to share aspects of the experience of other individuals rather than their affective states (Brinck 2018: 2). Thus, while the mirror neuron theory might be over-simplistic when used to explain the exact emotional state of a reader, and least of all readers’ alleged ability to project and replicate character emotion, it likely applies to the overall dynamic processing of art and particularly of the causal relationships underlying narrative media.

Against the critical backdrop outlined in this section, we adopt a broad and inclusive cognitive concept of empathy that can range from acknowledgement, comprehension, and perspective-taking to actual, scalable affective responses. We distance ourselves from the claim commonly made by narratologists to approximate the emotional state of the empathised. Following McDonald (2022), we instead reconceptualise empathy, generally speaking, as *feeling sideways*, a concept that can deflect egocentric undertones and, instead, conveys a genuine awareness that affect generated by engagement with narrative content can only ever allow a sideways glance at other people's lives, resulting in "feeling beside" rather than the emotional fusion implicated by "feeling with".

Following Keen (2007), we further agree that for a solid understanding of empathy in narrative theory, insights from cognitive, communication, and social sciences are indispensable, and we argue that this is particularly important in narrative environments that simulate the experiential qualities of the actual world. We therefore ground our own conceptual framework in a combination of narrative theory and empirical findings from human-computer interaction, neuroscience, and educational sciences, and we evaluate, adapt, and expand existing concepts in light of our participant data.

### **Our Empirical Study on Empathy in VR**

Our study aimed to examine the nature of empathy in VR fiction, demonstrate the benefits of a qualitative approach to VR, and develop a theory of medium-specific reading in VR as an environment that is known for its immersive, experiential qualities yet less so for its affordances for literary fiction and verbal art. More specifically, our study was driven by the question of what participants' discursive responses to reading a narrative VR work can tell us about the experiential and cognitive qualities of state empathy, as well as about the mediality of reading in VR.

To address these aims we used *The Book of Distance (TBoD)*, an open-access Canadian VR fictionalised documentary by Japanese-Canadian artist and filmmaker Randall Okita (2020). Produced by the National Film Board of Canada, *TBoD* won the Award for Best Immersive Experience at the 2021 Canadian Screen Awards. It is an interactive, animated, immersive storytelling experience made for HTC Vive, Meta Quest, Windows Mixed Reality, and Valve Index. Blending "techniques from mechanical sculpture, film, and stage to redefine personal storytelling in virtual reality" (Okita 2020), it uses conventions of many other media including documentary film, stagecraft, cartoon, traditional Japanese art, interactive narrative, photography, print, and handwriting. The work combines archival material like newspapers, letters, and

photographs with author-constructed, imaginary spaces that fill gaps in personal memory with imagined, often abstract, mashed-up, or minimalist designs that allow readers to project their own ideas and complete the story in associative, personalised ways. A full playthrough lasts approximately 30 minutes, which ideally matched our temporal constraints of 60 minutes per participant session and allowed us to follow the playthroughs directly with interviews, maximising short-time retention in our participants.

*TBoD* places the reader in the biographical context of Okita's grandfather Yonezo Okita, who left his native Hiroshima just before WW2 to start a family and build a small strawberry farm in Vancouver, BC. During the war, he was separated from his family and kept in an internment camp with many other Japanese Canadians under suspicion of espionage. Randall Okita, who appears re-embodied in the work in the triple role of narrator, fictionalised author, and stage director, takes the reader through his late grandfather's life, addressing them directly through voiceover and gestural prompts. He thus becomes a mediator between different historical periods, geographic and ontological spaces, and different generations. Throughout the experience, Randall's direct reader addresses maintain a metaleptic connection with the diegetically re-embodied reader, or fictionalised narratee.

The semi-abstract visual aesthetic of *TBoD* allows readers to enter a spatialising process, or "act of imagination" (Okita 2020), and to co-construct the memoir by filling the blanks left by Yonezo's titular silence about his past with personalised content. As we will show, in line with more autobiographical forms of (print) autofiction, the work thus blends fiction and fact into an "unstable compound" that emphasises "the narrator's or protagonist's or authorial alter ego's status as a writer or artists and that the book's creation is inscribed in the book itself" (Lorentzen 2018; see Dix 2022). This metafictional idea is encapsulated in the work's central interactive artefact: a photo album that contains all that is left of Yonezo's life and that the reader haptically opens and leaves through – as a remediation of an obsolete yet nonetheless multimedial form of biographical storytelling.

Okita remediates material from his family's archive in a semi-abstract visual environment reminiscent of a theatre stage (Eitzen 2021), integrating "2D and 3D hand-crafted sets reminiscent of Japanese woodblock prints" (Okita 2020). Characters are represented both as 2D photographs and as 3D animations, and while they are clearly labelled in the visual materials as family members from three generations, their faces are not rendered, thus creating an interesting tension between the concrete, realistic invocation of their actual historical counterparts and blank canvases in the storyworld (see Figure 6.1).



Figure 6.1 Screenshot from *TBoD*, faceless character portraits in Randall's office

The narrative experience is linear, with occasional interactive elements that pause the action and add low-key challenges such as playing a horseshoe game, clicking a camera button to take family photographs, hammering a fence pole into the ground, and picking up rocks in a field. These ludic-interactive elements are “essential to viewer engagement” as they “hold our attention” without distracting significantly from the work’s “impressive artistry” (Eitzen 2021). The narrative starts in Randall’s simulated office, where he displays portraits of Yonezo, Yonezo’s sister, Randall, Randall’s grandmother, and Randall’s dad (Figure 6.1). Stylistically, it is thus very clear from the beginning that the story is constructed around Yonezo and Randall, and that all other represented characters are defined through their relationships with them. The work thus has a strong narrative and verbal art component, combined with rounded characters and a story that was likely to evoke emotional responses in our audience.

### *The Protocol*

The study took place from March 2021 to June 2022 at the University of Bergen (Norway) and was conducted with 15 participants who were all students and staff from the Digital Culture, Media Arts and Education, and Game Studies programmes. Age and gender demographics were not recorded, but the age span was roughly between 22 and 60 years. All participants were fluent speakers of English and were purposively sampled in that they had to have at least some level of familiarity with digital fiction and VR. This was important to minimise the novelty effects digital fiction and specifically VR experiences tend to have on first-time users. The

participants were first introduced to the project as a whole, followed by a brief introduction of the work. The goals of the empirical study were broadly framed as “narrative interests” to avoid any priming towards specific aspects of the work. Participants completed a media exposure questionnaire and then embarked on a full playthrough of *TBoD*, uninterrupted by the researchers. This naturalistic setting was feasible because the work follows a linear path which readers only briefly pause in short, interactive scenes. Following each playthrough, the researchers then conducted a structured interview with the following questions:

- 1 What’s your immediate reaction to the experience you just had?
- 2 Could you describe your experience of being in VR/in the virtual space in more detail? Did you feel you were part of the same space as the characters?
- 3 What feelings did the story generate?
- 4 Can you describe your feelings towards the characters in the story?
- 5 Which of the characters do you remember the most? Can you tell us why?
- 6 Which of the characters did you care about the most? And why?
- 7 How did you feel towards the person telling the story?
- 8 How did you feel towards the main character (i.e., the grandfather Yonezo Okita)?
- 9 Who did you feel you were in relation to the other characters in the story? Can you describe that experience in as much detail as possible?

These questions are strongly medial, mimetic, and automimetic in character and therefore designed to elicit responses referring to the material VR experience as well as to individual characters and readers’ relationship to them. We followed a grounded-theory approach that did not aim to test existing readings of the work. Nor did we prime readers towards any particular theoretical concepts. We did not even mention “empathy” or any related technical terms in the questions or during the interviews. The interviews were video recorded, transcribed, and anonymised, followed by thematic coding in NVivo.<sup>2</sup> We coded for different types of empathy (cognitive, affective, associative); for sympathy, mnemonic and affective salience (memory vs. care); for feelings towards individual characters; for perceived reader role in-world (“Who was I in the story?”); for spatial references; intermedial references; and for the role of VR in the experience as a whole. The final three themes emerged during and from the analytical process and can therefore be considered inductive rather than deductive.

We then analysed the data at linguistic and paralinguistic levels. Lexical choices were particularly important in participants’ use of affective expressions, and especially emotional adjectives and nouns. At a phraseological



and sentential level, reduplications and interjections contributed to the construction of affective speech acts most vividly. Often we had to widen the analysis to entire paragraphs for contextual embedding, and occasionally paralinguistic, prosodic, and/or gestural information had to be considered for more conclusive explanations of heightened emotive responses.

### **Analysis**

As narrator, Randall begins his biographical musings in the form of a staged telephone conversation with his father, who is depicted as sitting in the corner of a room, labelled “Calgary, 2019”. This chronotope can be understood as the site of the diegesis, where the telling and showing are orchestrated. The father’s memories frame Yonezo as a quiet and stoic man, who never complained about the trials and tribulations of his past. The father characterises him thus: “He was so present by his lack of ... presence”, thus setting a rationale for Randall’s project – of preserving his grandfather’s legacy despite or indeed because of a dearth of tangible, archived evidence.

The intradiegetic narrative starts in the 18-year-old Yonezo’s family home in Hiroshima in the 1930s, where he is seen playing with his younger sister. The reader is invited to participate in the reconstruction of the story by taking a photo of the family and sending a letter to Yonezo’s in-laws-to-be in Vancouver. We help him pack his suitcase and see him take leave of his family and in particular the little sister, to whom Yonezo was very close. We then join him on his voyage to Canada, a scene effectively orchestrated by virtualised trusses of mechanical waves in the background. His future wife greets him from the pier, and we cross the Canadian border, physically drawn by Randall, with Yonezo, thus marking a transition into a new space and chapter of his life. The next scene shows the couple, now married with two children, building a strawberry farm from scratch. The reader assists the couple with work around the field and the house, sewing seeds, carrying rocks, hammering poles, and serving food to the children. The turning point to this rising action happens as Canada enters WW2 and Yonezo, along with over 22,000 other Japanese-Canadian citizens, is deported to an internment camp. Readers are present at the moment the Mounties enter the house to arrest Yonezo and separate him from his family. Again, the reader helps Yonezo pack his suitcase, only to find that, this time, the interactive choices are restricted to certain items that do not pose a risk to state security. We later learn that all the family’s belongings, land, and farm were confiscated and sold illegally.

At this point in the story, Randall confesses he “get[s] lost sometimes” as he attempts to reconstruct the conditions of the internment camp as an “unnarratable” moment, due to its traumatic, inhumane, and

incomprehensible implications (James 2022). Yonezo categorically refused to talk about this time, leaving Randall wondering “how to show this moment” and causing him to proceed largely elliptically (cf. James 2022). The reader must then switch on a spotlight that illuminates a barren courtyard, surrounded by a barbed-wire fence, with ghostlike shapes of people moving around the grey-shaded space. A sudden change of scene reveals that Yonezo is finally allowed to reunite with his family in Alberta, which is represented by a scene at a railway station where the reader has to wave with Yonezo to attract his family’s attention and embark on a train with him. The family ends up working as forced day labourers on a farm, as the news reaches them of Yonezo’s sister’s passing in the Hiroshima atomic bomb attack of 1945. Eventually the family manages to start from scratch and purchases a small house in Alberta, where Randall’s father grew up in a close-knit family environment yet with a living trauma of collective oppression and systemic crime pervading two generations to a degree of denial about their past and their cultural roots. The VR experience ends with Randall and his father sitting together and talking, with their backs facing the reader, who is invited to take a last look at the family photographs appearing on a transparent wall in front of them.

*Ontological Orientation: Medium-specific Spatial Double-deixis and Dually Embodied Metalepsis*

In our response data, we found that spatial parameters of the experience contributed significantly to readers’ perceptions of themselves in the story-world, as well as in relation to the characters and the narrator in particular. Our results are especially significant in the context of one scene in the narrative, which immediately precedes Yonezo’s crossing of the Canadian border, and which we refer to as the “Chalkline Scene” (see Figure 6.2). In this scene, the narrator character Randall draws a chalk line right in front of the reader in-world, almost pushing them aside to mark a boundary between different ontological realities – Japan and Canada, before and after Yonezo’s emigration – but also between the reader and the intradiegetic world that Randall conveys as Yonezo’s biography. Drawing the line, Randall addresses the reader directly: “Careful, just take a step back. This place is an act of imagination. It’s an idea. Do all places start like this?” With these words, he introduces the space of the narrative as essentially reconstructed from archive material and his own creative imagination. In this process, the reader is made aware of their role as spatially positioned onlooker, with the chalk line marking an ontological boundary that we cannot overstep conceptually or ethically. The fact that the reader’s first-person avatar physically follows Yonezo across the border and

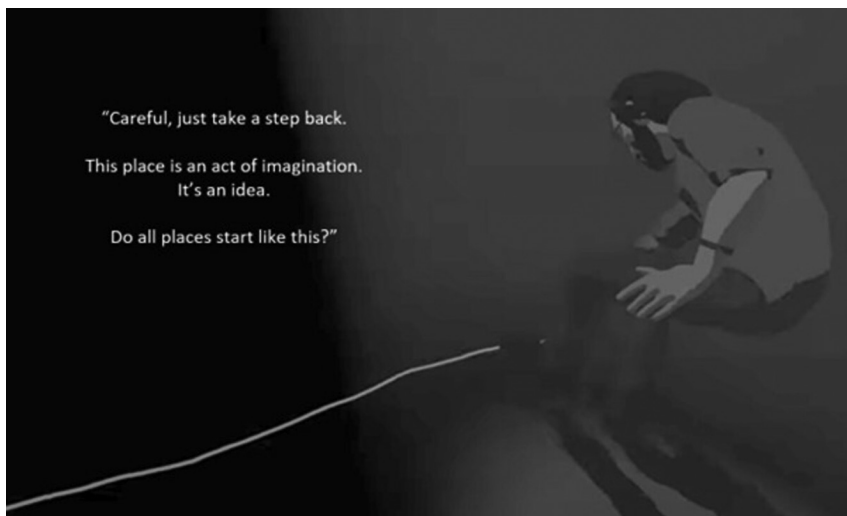


Figure 6.2 Screenshot from *TBoD*, the Chalkline Scene (*voiceover transcription ours*)

even has to show their passport to the customs officer before stepping through the gate cannot reduce the diegetic and psychological “distance” in the sense of remoteness from the lives depicted. Thus, despite the ontologically permeable qualities of VR world design, the reader retains an awareness of the ontological separation between their world and those of Yonezo and Randall throughout *TBoD*.

Several of our participants eloquently and decisively referred to this chalkline effect in a way that suggests that presence is not necessarily felt as intradiegetic co-presence with the related characters, but as a metafictional condition that places them in an imagined space between intra- and extradiegesis: the interlocutive space of the narration proper – the diegesis. There is overwhelming evidence from our data that this paradoxical condition manifests as a feeling of absence-in-presence:

- 1 “I was the person who wasn’t there.” (Kate, 288)
- 2 “You’re supposed to be there but also supposed to be not there.” (Kate, 66)
- 3 “And it was weird, because you just feel like you kind of both there and not there.” (Judith, 47–48)
- 4 “...like I’m in the same space, but there’s a distance.” (Carl, 36–37)
- 5 “I couldn’t act, I couldn’t ... I wasn’t there.” (Matthew, 112–113)
- 6 “I’m a part of the space because I’m there. And I’m looking and listening and everything and even interacting a little bit, but it’s not like I’m a part of this story.” (Vera, 66–69)

- 7 “I felt during maybe the first half, I felt like an invader into the story. It was just I felt a little displacement. Like I was just not supposed to be there kind of. But then when they were thrown out of their house that they had strawberry farm I felt very sad for them and, and more in the story I guess ... I was part of it, and I wasn’t” (Claire, 12–17; 33)
- 8 “I was not present there as my personality... it felt like a blind kind of presence... I felt more present as a social actor here in this room as a person undergoing an experiment and people being around me than I felt present there as someone.” (Edward, 199–223)

Quotes 1) to 8) resemble each other in that they encode presence and absence simultaneously – a paradoxical, antimimetic effect (Ensslin & Bell 2021) considered “weird” by Judith in 3). The story’s spatial design leaves the reader oscillating between intradiegesis and diegesis – the latter being the level of narrative communication between narrator and narratee. Matthew in 5) accounts for this experience as the inability to act or affect the unfolding events, despite the voyeuristic ability to look, listen, and interact “a little bit” reported by Vera in 6). That this invokes a metafictional level of reflection is shown in 2) (“supposed to be”), where Kate projects the ontological clash as authorial intent into her experience.

We propose the concept of *medium-specific spatial double-deixis* to explain the absence-in-presence effect of the Chalkline episode in narratological terms. Participants construct their situated identity in-world as both intradiegetic and diegetic (“both there and not there”, Judith), which reconfirms their perceived sense of dual embodiment. As 7) shows, this perception of space can also shift from a sense of “displacement” to one of proximity (“more in the story”), and back again, as Claire explains in the coda, “I was part of it, and I wasn’t.” That spatial double-deixis can reach in the opposite direction, from the diegetic into the reader’s extratextual space, is shown by Edward in 8). He “felt ... a blind kind of presence” that was overridden by his awareness of being “a social actor” in the physical world of the experiment. In cases where readers felt that their attention was wandering between extratextual, diegetic, and intradiegetic space, then, we can even refer to *medium-specific spatial triple-deixis*.

Responses to our question about who participants felt they were in the narrative convey an overwhelming dominance of perceived diegetic rather than intradiegetic roles. Only 20% of participants said they felt they were members or parts of the family, such as the grandfather (Ole), an uncle (Claire), or an invisible “ghost in their world just watching” (Fiona, 85). Claire explains that she perceived her identity to be changing intradiegetically from an “intruder” (86) and a “stranger” (35) to an “uncle” (91) as the situation of the family became increasingly precarious leading up to the deportation. Conversely, 80% of participants projected themselves in a diegetically located, voyeuristic role of (silent) listener, spectator, observer,

audience, and/or viewer. Some of them, like Ingrid, conceded that, in this voyeuristic role, they “did not lose the me, the feeling that it is me who’s there” (Ingrid, 222–223); or, in a more reductive way, that this self-perceived role was “some sort of lessened version of myself” (Edward, 196), and that this lessening was due to a lack of agency. Thus, the visual and phenomenological space mapped by Randall creates a visible and cognitively perceived ontological sphere where narrator and narratee meet and enter into an imagined dialogue. This dialogue is, however, rendered monologically as the reader-as-narratee can only physically enact Randall’s implicit and explicit instructions. This narrative contract is the precondition for the story to unfold materially, as without interacting, there is no progress at key interactive moments during the experience.

Randall-the-narrator acts as implied, fictional, and represented alter ego of the author. Simultaneously, the flesh-and-blood reader is projected into the diegesis as implied, fictional, and partly represented (hands-only) alter ego of themselves. A notable effect of this blending of ontological roles is the frequent discursive conflation of “author” and “narrator” on the one hand, and “reader/me” and narratee on the other in our data. Paul, for example, explains, “I felt like I was in the ... author space, the narrator space. It was a space that he [Randall] was fully controlling” (254–255). We refer to this unconscious metafictional effect, which manifests itself here in the synonymous use of “author” and “narrator” and their conflation in “he” while keeping the “I” dually anchored both inside and outside the text, as *dual embodied metalepsis*. Rather than appearing in doubly deictic form, as a paradox between two mutually exclusive concepts, different ontological roles are folded into one another, erasing the ontological boundary between the extratextual and the diegetic sphere. Thus, the reader’s perceived double-situatedness does not map onto their perception of the author-narrator.

Dual embodied metalepsis, as observed in our data, resonates with some of the key principles of autofiction. According to Gibbons, autofiction is “a genre in which the author appears as a character, the nonfiction of their autobiographical life combining with the fiction of invention and fabrication” (2022: 471). Yet, Randall’s work unmistakably centres around the story of his grandfather, thus foregrounding the other as protagonist while preserving the self in a mediated and mediating role. This character constellation thus echoes Mortimer’s (2009) print-derived concept of allofiction, which

is determined by the portraits of nearby others, who might be mother, father, uncles, aunts, grandparents, siblings, children, mistress, lover, close colleague or friend. These portraits of the other are passed through the portrait of the self; they stand in relation to the self; they affect the self; the self affects them.

As a subtype of autofiction, allofiction relates a biofictional story of a person that is emotionally and/or biologically close to the fictionalised and/or flesh-and-blood author. Yet, simultaneously, the invoked relational links amplify and metafictionally centre the autobiographical identity of the author-narrator and throw into question their motivations for appearing in their own fictional constructions in re-embodied form. In *TBoD*, therefore, Randall acts as allo-protagonist in a narrative that he projects as primarily a memoir of his own grandfather, and he takes advantage of the representational affordances of VR in projecting and visualising co-presence across ontological boundaries.

Gibbons (2022: 471) points out that “[c]ritical discussions of autofiction are dominated by arguments concerning their dual narrative structure evoking a duet of imaginative visions which, in turn, requires shifting reading strategies” vis-à-vis the inherent “ontological duality” of the genre. Her empirical data show that print autofiction readers blend mental models of intra- and extrafictional individuals. They “draw correspondences between the mental representations generated by the text and their knowledge of the author” and “blend mental constructs in order to interpret characters as representations of real people” (471). These observations are empirically observable in our study and complemented medium-specifically by the reader’s self-projection into the fictional world, causing a blend between mental models of extrafictional self and diegetic narratee. The latter role puts the thus fictionalised reader-narratee under the aegis of the ontologically dual narrator-author figure Randall, who guides the action throughout and reduces reader agency in plot co-construction to zero. It is this feature that participants like Ingrid and Carl lament because their expectations as frequent players of videogames caused them to anticipate, in a VR “game”, greater levels of consequential agency and interactivity.

### *Medial Orientation: Ambimedial Response*

From a theoretical perspective, “reading” in VR can stand for at least two processes: on the one hand, it can refer to the deciphering of letters on a mediated page or surface, which happens frequently in *TBoD*, ranging from notes on postcards and boards, captions in photo albums to entire letters and government documents. Medium-specific reading of such “traditional” written documents in VR also involves haptic interaction. Readers can touch, pick up, turn around, throw, and shift written documents in the 360-degree space, which approximates the qualities of reading in a physical space yet transforms and defamiliarises the process at the same time. On the other hand, and in a broader, multimodally inclusive sense, VR reading is multi-, inter-, and transmedial. Written language is only one

of many audiovisual, animated, procedurally interactive, and spatiotemporally organised media embedded and thus intertextually referenced in the work. All these medial sources need to be decoded both individually, in their own medium-specific ways, and as multimodally embedded and embodied semiotic clusters.

Meaning in VR is also organised transmedially, which means reading and meaning-making happen in complementary ways across a variety of materially distinctive media objects and semiotic-sensory modes. For example, after the internment camp scene described above, readers of *TBoD* can pick up and read government letters addressed to the protagonist telling him that his property and personal belongings have been disowned and resold. This information is combined with a 3D animation of Yonezo and his family working in a field, voiced over with the narrator's commentary that this was essentially forced labour and that Yonezo had been deprived of many of his basic human rights. On the table in front of the reader are the same photographs from the family's past at their strawberry farm that were seen earlier in the narrative, thus suggesting that the memories triggered by the pictures kept Yonezo's hopes up and encouraged him to keep going. The physical pain and suffering, which is not encoded in the written or photographic documents, becomes visible in the animated footage showing the family labouring in fields owned by other people.

On Randall Okita's website, *TBoD* is described as a multimedia work that draws on conventions from (Japanese) woodblock art, sculpture, film, biographical narrative, performance art, print and photographic archives, and interactive media. The work

blends techniques from mechanical sculpture, film, and stage to redefine personal storytelling in virtual reality. Family archives add a haunting layer of realism. 2D and 3D hand-crafted sets reminiscent of Japanese woodblock prints, evocative character design, and seamless choreography combine with surprising moments of interaction to gently whisk us across the ocean and through the years. / Okita invites us to participate in this generous act of imagination: a space of magical theatre and generational echoes.

The creative, unconventional, and surprising aspects of the work are framed as "magical theatre", leaving the exact meaning of "magical" to the audience's imagination and interpretation. In an accompanying SIGGRAPH paper, Oppenheim and Okita (2020) frame the work in terms that are more closely connected with the goals of its producer, the National Film Board of Canada: as "an amalgam of creative non-fiction film, interactive storytelling, performative installation, and Japanese theatre

languages”, and as an “interactive documentary” aimed to “construct and [let the audience] experience the real rather than to represent it” (Oppenheim & Okita 2020).

Perhaps not surprisingly, the blended and “magical” in the sense of unprecedented, awe-inspiring experiential qualities of *TBoD* have been interpreted variably, multiterminously, and partly neologically by scholars and scientists across various disciplines. For example, in a recent IEEE paper, Tatro-Duarte & MacQuarrie (2021) emphasise the work’s folkloristic and mythological qualities, as it “models best practices in the collection, presentation, and analyses of family folktales”. Kazlauskaitė (2021) uses the genre labels “affective history” and “reenactment” to underscore her analysis of *TBoD* as a work that renegotiates phenomenological aspects of proximity and distance in VR. Barbara and Haahr (2021) highlight the importance of interactive devices like the camera controls and the narrative function of the introductory horseshoe minigame as “ice-breaker” and expository device. The same tossing game is reframed by Cohn (2021) as a metamedial device symbolising “the desire for [a maximally] unmediated experience, but also the impossibility of ever attaining it”. Notably, Cohn frames *TBoD* as a “game”, thus foregrounding its interactive, problem-solving aspects. Existing scholarship thus collectively conveys the impossibility of pinning down the multimedial qualities of *TBoD* comprehensively, which must be seen as a medium- and work-specific constraint in its own right. It once again reconfirms the very contingencies at play not only in understanding the affective affordances of the medium, but indeed in experiencing, studying, and documenting its very mediality, or *medialities*, to be more precise.

In response to our questions about the nature of the VR reading experience in general, we observed a greater-than-expected variety of references to other media. Our dataset contains over 140 instances in which participants referred to different kinds of media and fictional genres when prompted to talk about their medial experience of *TBoD* as a whole. Perhaps not surprisingly, those who had more than cursory experience with VR named other VR works in a comparative manner including *Traveling While Black* (*TWB*), *Beat Saber*, *Clouds Over Sidra*, and *Queerskins: A Love Story*. Leaving aside references to other VR works, participant responses can be grouped into broad media categories, as shown in Figure 6.3.

Their distribution shows a clear preponderance of print media (25%), followed by film and documentary (19%), performance art and theatre (18%), game and interactive narrative (13%), fine arts and photography (12%), museum and exhibition (5%), radio and music (4%), and finally oral storytelling and telephone (4%). The most frequently mentioned print references were the book at the beginning of the work, books read by Japanese authors that participants felt reminded of, but also negative mentions



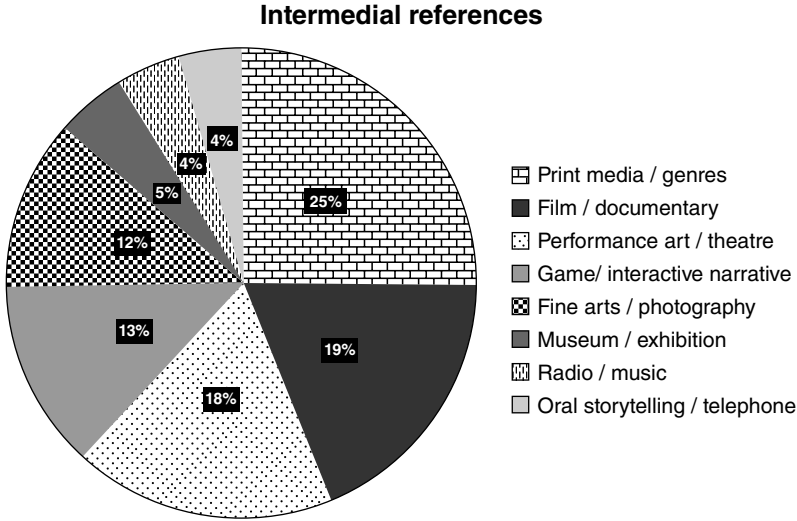


Figure 6.3 Participants' references to other media

by participants who would have preferred the same biographical story in book form. Other frequently mentioned artefacts in the print category were government documents and letters, as well as cartoons and visual novels evoked by the visual style of the work. A notable outlier was Ole, who explained that the “two dimensionality of [the work] is very much ... like a pop-up book that I control”.

Many participants who referred to filmic media likened the linear, on-the-rails experience of *TBoD* to watching a movie without having agency to shape the plot, or without having an opportunity to co-experience, as they would at a movie theatre. An important difference from cinematic viewing was the above-mentioned and titular sense of “distance” created by the work both through schematic rather than realistic character design, and through metonymic representation of the reader (arms-only) in the projected space.

References to performance arts contained words like “theatre”, “stage”, “(costume) drama”, “roleplay”, “pantomime”, and “opera”. Theatre-lover Matthew explained that the work “put me in the seat, standing up but it was a red velvet theatre seat. So that’s where I was” (215–216). Closest to the authorial label of “magic theatre” came Paul, who explained that “it was like a theatre production. I mean, it felt like that to me, especially in the beginning ... he was like this magician, you know, like, here’s a, here’s now this thing” (256–259). The paint brush given to the reader later in the story to help Yonezo post a letter to Vancouver felt like a “magic wand” (501) to Paul, thus echoing the intended sense of surprise and surrealism.

Some participants accentuated the interactive affordances of the work, referring to it as a “game” that requires particular competencies on the part of the player, which did not, however, have the usual stressful effect of having to learn, master, and achieve challenging skills and tasks. For media arts expert Hans, the experience was “more than a game but it’s a cross, a crossover, right? All those elements, like a doc fic or documentary fiction. With cartoonish elements and gaming elements” (452–454).

The most artistic scene in the sense of fine arts was perceived by many as Yonezo’s voyage to Canada, staged through mechanical waves on trusses. Hans, again, found the “graphics ... incredible. The design, really beautiful, that scene when ... when the character is saying goodbye with the waves, kind of influenced by kind of Japanese old painting was very beautiful with the waves” (102–105). Others emphasised the museal qualities of the work, which to them felt like a guided tour with interactive exhibits:

I think my relationship with Randall was a bit like yeah, when you’re in a museum, and there’s a guide ... like the person guide who then tells you stuff and sometimes it’s like, “oh, ... you can touch that, or play with this”. So it felt a bit like that.

(Andrew, 302–306)

To Matthew, the association was even stronger as he felt reminded of a visit to the Jewish Museum in Berlin, where exhibits of children’s suitcases evoked images of the horrors of the Holocaust for him.

Although only six references were made to aural media like radio, podcast, and music, those participants responded to the dominance of voiceover narration in an otherwise visual medium in very different ways. While Judith felt “overwhelmed” (28) by it, Ole was led to coin a new concept, which he referred to as “illustrated radio” because of the “very linear” narrative with “presentational moments within this, you know, the audio track is the anchor. And then I have these graphics that illustrate what’s happening. So yeah, I would call it illustrated radio” (Ole, 357–364).

As the preceding analysis shows, our participant data demonstrate the phenomenon of contingent and pluralistic mediality, which we shall refer to as ambimediality. This new response type relates to readers’ inter-, trans-, and multimedial references as they attempt to reconcile an unfamiliar medial experience with more familiar reading situations. The prefix “ambi” encapsulates notions of both ambivalent and ambient, thus combining intermedial anchorings with the notion that narrative comprehension and processing happen relative and as a response to the environmental, embodied, social, and biographical embeddedness of each individual reader. This ambient ambivalence is not necessarily medium specific to VR, and yet VR technologies combine multiple medial embedding with

re-embodied experientiality in unique ways and are thus ideally disposed to afford ambimedial reading.

What our summative analysis of participants' medial references and thus their ambimedial responses reveals is that the work defied and transgressed conventional understandings of multimedia and immersive storytelling for the participants. The preponderance of references to print media deviates from how most existing scholarship and the author/producers have framed the work. The latter have placed greater weight on fine, visual, and performing arts, as well as interactive and ludic aspects. This observation suggests that we are indeed dealing with a new form of (digital) fiction. Simultaneously, participants may have felt cued towards print-related references because they had been introduced to the work as a "digital fiction" at the beginning of the experiment. What can be said with certainty, however, is that traditional media and genre labels do the complexities and contingencies of experiencing a work like *TBoD* a disservice. Rather, in addition to intermedial, multimedial, and transmedial conceptualisations, we need to pay close attention to the individual contingencies, creative capacities, and the referential, experiential frames readers bring to works like this. These contingencies add to and are constitutive of the ambimediality of reading in VR.

### *Mediality and Engagement*

The previous section shows how readers processed the medium-specific experience and what frames of reference they constructed to make sense of VR's mediality in general. With respect to participants' engagement with the narrative and its characters, our data also show that various medium-specific factors played a role. Firstly, the physical constraints of the VR equipment affected participants' overall experience. Several of them mentioned the weight of the headset, described by Stephen as a "block of plastic". Contradicting the full-immersion hypothesis (e.g., Pianzola & Bálint 2020), some mentioned the fact that the ability to peek through it at the bottom helped them navigate around the physical room while simultaneously removing the ability to fully disconnect from the outside world. Others mentioned the tiring effects of standing up during the 30-minute playthrough as impacting concentration and affective engagement. The following quote by Ingrid demonstrates how this technological, environmental, and corporeal constraint impeded her ability to locate to the story-world and develop an emotional response:

I would have to be seated to get into a sadness because the tiredness of standing and a little bit of a boredom, of hand boredom, is making it impossible for me to be like fully set in the story.

(272–275)

In Ingrid's medial response, she focuses on the materiality of the reading experience (e.g., being seated; feeling tired due to standing), using a transportation metaphor to show it precluded her from being immersed into the storyworld. Rather than incidental environmental propping adding to the experience, as seen in relation to *WALLPAPER* in Chapter 4, the extratextual context of the reading experience instead precluded full engagement with the environment acting as what Kuzmičová (2016) defines as a “distractor” (293).

Several participants flagged the spatial boundaries of the Quest Guardian as a potential hindrance to transportation. The Guardian is a virtual line mapped by players before starting the software and that defines the physical space within which the action takes place. The Guardian can be transgressed in-world, moving the user's field of vision into a grey-shaded, opaque representation of their actual, real-world surroundings called Passthrough. Overstepping or sticking one's head or hands through the Guardian therefore visualises and amplifies the physical set-up of the room where the interaction takes place.

Like Ingrid above, some participants reported that they were always aware that they were doubly embodied, and that the embodied VR experience actually increased their awareness of their physical surroundings rather than wholly pulling them into the virtual storyworld. An effect that contributes to this conscious dual embodiment is described by Paul:

There are certain conventions that I was already aware of in terms of the hands, and that you would grip something and then move it ... And those ... conventions ... feel very different from, it's a different kind of manipulation than me just, you know, doing a little, it's like everything is like sort of exaggerated. And I think to some degree that exaggeration ... pulls me out of it a little bit as an experience, because I'm aware of that exaggerated quality of my own movement. And also my like, very hesitant, ... way of moving around, and not wanting to ... trip on something.  
(204–213)

In his medial response, Paul perceives a dissonance between his represented and his actual hands, on top of a feeling of uncertainty regarding his ability to move around freely. As also evidenced in the data from Chapter 5, Paul uses the container metaphor (“pulls me out of it”) to describe this feeling.

The ergodic elements received very mixed responses: most participants struggled with the controls to some extent, especially with the camera click and the horseshoe minigame. Some found the interactive elements “trivial” (Stephen, 28), unnecessary, poorly done, and/or disruptive. Others enjoyed having them. Julie, for example, felt helping Yonezo and his wife in the strawberry field

was quite ... emotional like in a nice way when he was building his house and you had to lift up doing...I love doing that with my own family like having a little *dugnad* [Norwegian for volunteer work] and helping out. And that was ... nice... And also it was cool that it wasn't like you had to do it like for hours.

(138–142)

Julie's medial and automimetic response suggests that the time-limit shortness and social function of the interactivity had a personally relevant, affective impact on her, leading to an "emotional" response. She also notes that the brevity of the activity was instrumental in her enjoying it.

Another medium-specific factor in evoking emotional responses were the interactive documents placed in numerous situations throughout the narrative. Paul, for example,

found [them] really emotionally strong to read ... the official letters of sale of the belongings that was really at a strong moment. But it ... too was undermined because they were taken away from me when I'm in the middle of reading them. And I want to read them all. I feel like ... these are actually really interesting ... and really sort of powerful documents and the imagining of someone receiving these and reading them was really a strong move. For me like to, you know, to read this official language, right, and this is all you get is this piece of paper. That ... gives you so little information. And it's so, so abstracted, and so, so cold. Yeah, ... I found that really emotionally moving. But I wanted to read the rest.

(335–347)

In this synthetic (e.g., "so abstracted, so cold"), medial (e.g., "they were taken away from me"), and thematic (e.g., "powerful documents and the imagining of someone receiving these") response, we can see that object-orientedness, which is a medium-specific feature of VR narrative, can have strong empathic effects. In this case, the ability to pick up, hold, and read original government documents in their matter-of-fact, elliptical and systematically violent stylistic register can convey a sense of powerlessness and anxiety to the reader, especially when they are denied the time they feel they need to read them in the storyworld.

To some participants only certain types of interactive elements felt meaningful ontologically. Edward, for example, mentioned that taking photos in a more "wholly simulated" (156) way than performing symbolic, gravity-removed actions in the strawberry field placed him at the kind of social distance that aligned with his imagined role in the storyworld. Suggesting that this would be "something that you maybe would actually do"

(149), he positions himself as a socially and historically removed voyeur as opposed to a character within the storyworld. There is thus a critical and spatial distance that prohibits him from inhabiting the character either ontologically or emotionally. What Edward's and Paul's responses tell us is that not only is immersive VR reading directly affected by site-specific factors of the physical experience, but that material interactions built into the design of a VR narrative can amplify feelings of transportation if coherent with the reader's perceived fictionalised role in the story world.

### *Empathy with Whom, and How?*

The previous sections have shown how the reading environment affected individual readers' medial, ontological, and emotional relationship to *TBoD*. With respect to empathy, our data also suggest that there was a diversity of response with regard to who participants cared about, who was most salient in their memories, and what motivated participants to develop stronger feelings towards some characters rather than others.

There is a propensity in the existing literature on empathy in VR to assume a universal and often vague and/or implied notion of the empathised, or the character(s) at whom empathic engagement is directed. Unsurprisingly, this assumption defaults to the protagonist or indeed leaves the empathised unmentioned entirely (e.g., Schutte & Stilinović 2017; Cummings et al. 2021). However, responses to questions 5 and 6 in the interview protocol, about participants' best remembered character first, followed by their most cared-for character, shows that readers cared for and/or empathised with a range of characters and that character empathy is subjectively negotiated as opposed to uniformly experienced.

Figure 6.4 shows the distribution of most remembered (mnemonically salient) and most cared-about (affectively salient) characters in our participant responses. The black-shaded cells represent most remembered, light grey most cared-about, and dark grey signals characters that were identified as both mnemonically and affectively most salient. The grey-shaded areas labelled "neg" represent affectively salient characters with explicitly negative connotations. The participants who did develop negative affect against the grandmother and Yonezo explained those in terms of the strong gender imbalance reflected by the work's aesthetic and narrative design.

The importance of care in videogames and other interactive narrative environments has been highlighted by game philosophers Gualeni and Vella. In *Virtual Existentialism* (2020), they draw on Heideggerian ideas of care, a relational concept encompassing human and nonhuman, animate and non-animate beings that is considered central to how humans understand their being-in-the-world – no matter whether actual or (auto-)fictional. Caring "for" (*Fürsorge*) is existentially more significant than caring "about"

	Yonezo	Randall	Father	Grandmother	Sister	Family	Children
Andrew							
Carl							
Judith							
Claire							
Edward							
Fiona							
Julie							
Kate							
Ingrid				neg			
Matthew							
Paul	neg			neg			
Stephen							
Hans				neg			
Ole							
Vera							

Figure 6.4 Mnemonically (black) and affectively (light grey) salient characters, including combinations of both (dark grey) and negatively cared-about characters (light grey with “neg”)

(*Sorge*) because it implies a more active stance. Whereas *Sorge* is the precondition of *Fürsorge*, only *Fürsorge* can lead to prosocial action. *Fürsorge* therefore resonates with the notion of compassion, and for this particular aspect of our study, we thus conflate caring about with affective empathy (i.e., “one’s personal affective reactions to others’ experiences and expressions” [Cummings et al. 2021: 4]). Importantly, as Gualeni and Vella show, people do not necessarily care about the most visually or cognitively salient things or beings in their lives, although reinforcement learning might condition them to do so. Likewise, our data show that the discrepancy between mnemonic and affective salience is real and can overthrow or at least relativise the widely sanctioned narratological centrality of protagonist and narrator when it comes to empathy.

The vast majority of our participants gave different answers to the two questions (about best remembered and most cared-for characters). While it is not surprising that Randall and, to a lesser degree, Yonezo were perceived as mnemonically salient by the majority of respondents, some noteworthy outliers foregrounded the father, the grandmother, or the sister. Notably, the sister only appears in two short scenes and, like the grandmother, remains voiceless and nameless throughout. The scene that stuck in participants’ memory, however, was the aesthetically stylised atomic bomb explosion in Hiroshima, which resonated with Carl’s, Fiona’s, and Ingrid’s historical awareness and overrode other scenes and characters in

the narrative for them. The discrepancies are even stronger with respect to affective salience. We can see that minor characters, including again the grandmother, the sister, but also the children and the family as a whole, were singled out as most cared about by some participants. Matthew, for example, who otherwise did not report any affective involvement with any of the characters, explained upon prompt that his concern about the children in the story (i.e., Randall's father and aunt during WW2) was rooted in his role as a real-life father – another piece of evidence that personal situatedness is a key contingency that can cue emotional involvement even if the narrative experience as a whole does not.

Similarly, as we demonstrated in the previous section in relation to Julie's predilection for volunteer work, participants' individual situatedness in life generally impacted their ability to empathise in diverse ways. Julie, who is a professional photographer, felt inspired by the ability to take pictures. Her overall enjoyment and high levels of empathy were further facilitated by her memory of using VR during chemotherapy, which served as strategic escapism for mental wellbeing. Julie further shares a passion for Japanese media and art with Hans, both of whom showed strong positive emotional responses overall. Ingrid, conversely, who has a history of spine injury, felt unable to "let go of a physical presence outside" (165) as a measure of caution. Finally, having a second- or third-generation migrant background had an associative emotive effect in several participants. As Judith put it,

I think ... a user ... always perceives better if he can relate himself to the story like he just connects like the story with his own experience... and like, for the grandfather ... really connected to my own family experiences. ... because my grandfather also moved to a different country when he was quite young when he was like 17 years old, but I always felt like he still carries a lot from his ... home. Like, he never forgets about that and I felt the same for this character, even though ... the main character mentions, like his grandchild mentions that, in that case, grandfather never speaks to him in Japanese. But at the same time, this alienation, I feel is the urge to save... to maintain this precious feelings of home and some sort of traumatic experience and like, just to keep it to yourself just ... so no one could, like, interfere.

(202–219)

In this automimetic and thematic response, Judith attributes her own empathic reaction to a family history of migration and traumatic memory that is worth preserving, where the duty to preserve may lie with later generations whose voices may be less constrained by the need for personal protection than those of their ancestors who experienced the trauma themselves.



The strongest, most visceral empathetic response to the story came from Ole, the only participant who positioned himself as “the grandfather” during the narrative experience:

[I was] the grandfather in terms of mirroring his experiences, being able to project myself into his feelings, ... the ambiguity of leaving... even... the tension within the narrative, you know, if he was 15 and then suddenly jumping to them creating this house... okay, it was a different time, I guess. But absolutely projecting myself within his experience, it was nice that the author had the opportunity to narrate this, to give this story some rails.

(Ole, 156–167)

Ole was the only participant who had actually been to and lived near the place where the story is set and seen the internment camps on the west coast of the United States and Canada:

I was shocked. And I mean, shocked. Standing in the strawberry field looking at the trees. ... It was home. .... And I literally sat there and said, “Oh, my God, I had no idea I missed home.” And it was fascinating to me. And that’s why I don’t know if you noticed, but the strawberry fields. I just sat there and looked up at the trees. Yeah. It was like, wow, I’ve been in literally 1000s of these, of these places where I’ve just stood and looked at the trees. And there are no Douglas Firs in Norway. ... And those have been the trees of my life, ... So yeah, it was, it was... [chokes up]. But there were also real feelings of embarrassment, having been someone who is part of a culture that chose to enter a group of people simply because of their heritage, many of which were born in America, all of which who had built lives in America. ...

In Seattle, where I’m from, directly across uhm the water is a place called Bainbridge Island. It’s... literally take a ferry there, and it’s 15 minutes. And all of the farms were wiped out on Bainbridge Island. It was all Japanese farms, bean farms, strawberry farms, marionberry, raspberry, all of those people lost everything. There are...uhm there’s a hotel and tea shop in downtown Seattle what’s called the International District in Japantown. Where when you go in to get tea, they have a large plexiglass plate in the floor, and you can look in the basement and there’s still baggage left from the Japanese who couldn’t take everything and left their bags in the basement of this hotel for safekeeping, and were never able to come back and retrieve it. ... And it was Japanese families who were in Seattle who lost everything.... They were interred.... And many of them lost their homes, they lost their businesses, they lost everything. So... and yeah, I have friends who I worked with over the

years, who when the Japanese received reparations from the United States literally got checks because they were interned as kids.... I know what those barracks looked like. It was a concentration camp.

The affective poignancy and affective precision of Ole's automimetic response shows a link between personal experience, geocultural identity, and the ability to build cognitive, affective, and even associative empathy levels while also conveying, on a more metacognitive level, a sense of complicity or survivor's guilt, framed as "embarrassment". His strong affective response is further heightened by his media production background, which enables him to adopt a metafictional stance from the outset ("to give this story some rails"). Unlike other participants with a production background, like Vera, Stephen, and Matthew, who showed low affective response levels, Ole's unique intersections between personal, embodied memory, historical awareness, and narrative production background correlated with the strongest, associative-empathic response in our dataset.

Perhaps surprisingly, none of the participants mentioned the faceless faces as an anti-empathic factor. Nor did they obscure any sense of perceived realism:

I had no problem whatsoever with [the faceless faces], [they] did not take away any reality for me. ... I was able to fill that with whatever I wanted and needed. So ... that was quite nice actually, it did not represent a lack of reality at all.

(Matthew, 64–68)

Conversely, the neglect of female figures in the narrative inspired negative emotional responses in some participants, who lamented the monolithic visual design of the grandmother, who is always represented wearing the same red dress and high heels, even in the fields:

The whole narrative was very male in a way that I sort of had an issue with it, especially you could see like, there's this woman just waiting for him and in Canada, and I was like, but what, "who is she?", like, "Why is she waiting for him?", "Where did she come from" "What happened to her?" ... And ... that was something I kept returning to. .... I mean, [the experience] was quite emotionally strong in places. And I do think it does communicate a sense of loss, ... [yet] I did find myself sort of distanced from, I think, because I was thinking critically about the grandmother. And that sort of pulled me out of identifying with the grandfather, because I felt that ... was a narrative problem, or a decision that I didn't ... like, and so ... that separated me a bit from it.

(Paul, 46–58; 312–285)

Paul's thematic and automimetic response shows how a pervasive critical, and here specifically feminist, stance in the reader can also have a strong, inhibitive impact in narrative situations that might otherwise approximate associative levels of empathy, or "identification". Paul felt "separated" because he felt compromised by the narrative's treatment of the women characters and this perspectival dissonance prevented emotional identification with elements of what he otherwise saw as an "emotionally strong" text.

The data also show that the protagonist and his role in empathic processes can be seen as a vehicle, or foil, through which readers can learn how to empathise with themselves, their own ambitions, and anxieties. When asked about how he was feeling towards Yonezo, Ole said,

It's interesting because Yonezo is so stoic. And ... he, at least within the story, is ... so ... reticent to share anything, never spoke Japanese, never spoke of internment, any of those sorts of things. He becomes a blank canvas by which you can project emotions into him. And so how I felt about him was projecting those feelings of anxiety of what the future holds, feelings of ambition, about I'm going to build something, I'm going to create a world of my own, where I can be happy, ... whatever that happiness is. I certainly understood his desire to try to make a better life, trying to create something where he would have satisfaction. So how did I feel about him? He was a blank canvas. So really, it's like: how do you feel about yourself?

(334–346)

Thus, instead of the often assumed, selfish and ethically problematic concepts of sympathy as feeling "for" and empathy as feeling "with" or feeling somebody else's feelings, what Ole describes here in his automimetic response is a bidirectional process of "feeling sideways and back" (cf. McDonald 2022). In this process, feeling sideways bounces back and can therefore work as a reflection of the reader's very own situatedness. Ryan already includes "emotions felt for oneself" (2015: 108) in her concept of emotional immersion across media (see Chapter 4), and we do not claim that this effect can only happen in or through VR. Yet we would argue that the strong associative empathy perceived by Ole, which was primed by spatial design, objects and settings (such as "the trees of [his] life" [200] he looked up to in-world, and the strawberry fields he knew from his past) had a role to play in his ability to "project" (157), "understand" (243) and ultimately "create" (341) a mirror image for himself. It should be noted that Ole was the only participant in our sample who reported processes of self-empathy. This demonstrates that the empathy machine hypothesis (or

variations thereof) is plausible in cases where the personal contingencies of individual users align them closely with the narrative content, and where the path to affective engagement is therefore straightforward and cognitively pre-mapped. However, empathy is not a given in VR, any more than it is in fiction written in other media.

### **Our New Narrative Empathy Spectrum**

As shown in the preceding analysis, participants' personal circumstances affect their ability to empathise with characters in *TBoD*. For example, readers such as Matthew and Stephen, who have professional media production backgrounds yet no autobiographical associations with the story, did not show any discernible levels of affective or associate empathy. In fact, their responses were explicitly or implicitly non-empathic. Stephen explains his response as rather one of

curiosity. Sympathy to a certain degree. Yeah. I mean, ... I don't think they ever rose to you know, sometimes in a novel or, or a film, they kind of rise to a sense of identification where you feel like they're people, [whereas here] it wasn't that same sense of immersive identification.  
(217–223)

Stephen's medial response links his ability to "identify" and experience sympathy with an "interest in the characters as possible people" (Phelan 2005: 20) and thus a mimetic effect that he associates with certain novels and films in opposition to the VR experience he just went through. Notably, he staggers his response from "curiosity" to "sympathy" but stops short of expressing any emotions that might come close to "identification" – which, later in the interview, Stephen defines as interchangeable with empathy. He mentions the verb "rose", which suggests that not only are we dealing with a scalar, or staggered concept, but indeed with a dynamic one too, which can change throughout a narrative experience and/or the discursive response itself.

A similar kind of staggered dynamic is conveyed by Kate (25–35), who answers the questions of what kinds of feelings the story generated in her thus:

Oh. Compassion I guess, is that a feeling? And also, ... he's saying like, I didn't know that until high school. I also did not know this, like, at all to be honest about Canada. So, anger. ... you feel like angry at first, and then you're like, wait, should I be angry about this? Is there a different feeling that I should have?

In Kate's thematic response, she reports emotional engagement moving from "compassion", the affective qualities of which she questions, to comprehension elements suggesting cognitive empathy ("know ... about Canada"), followed by a strong affective response ("anger"). This anger, however, is succeeded by a reflective stance, indicating her metacognitive, metafictional uncertainty about what an appropriate affective response might be in the first place. In a follow-up interview, Kate explains her personal concept of compassion as "prosocial action as a result of sympathising with another person (instead of empathising)" (personal correspondence, 01/07/2022). In other words, she sees the prosocial potential of compassion as independent from any empathic engagement.

In light of these and other passages from our data that show varying degrees of emotional engagement due to either ontological orientation, medial orientation, and/or individual circumstances, we suggest that concepts of empathy, sympathy/compassion, but also more preliminary forms of cognitive engagement like perception, interest and curiosity, are best represented as a continuum rather than as absolute and rigid either-or categories. In so doing, we align our findings with Levett-Jones and Cant (2019), who distil an "empathy continuum" from an "integrative review of contemporary nursing literature". Their continuum consists of three stages ranging from perception and self-awareness (the perceiving stage) to processing (empathic imagination, cognitive and affective empathy), and finally empathic response and subsequent action and reflection. The stages "contain a broad set of interwoven attributes and abilities that need to be mastered through deliberate practice and deep reflection". Levett-Jones and Cant's empathy continuum thus serves as a conceptual framework for teaching "the meaning, attributes and application of empathy in [clinical] practice". It follows a pragmatic, action-oriented goal that is geared towards professional practice as opposed to our fiction-orientated, theory-forming motivations. That said, its tripartite framework lends itself to positioning our participant responses, which we explain below.

The idea of a spectrum is paralleled by text-analytical research on empathy in video game studies. Jerrett et al. (2020) propose an empathy spectrum "that can be used to subjectively classify games" as varied in aesthetics and mechanics in three games (*Papers, Please, The Beginner's Guide*, and *The Walking Dead*). Their spectrum captures rising levels of "emotional engagement", ranging from pity (negative affect) to cognitive and reactive empathy (understanding and sympathy) to parallel empathy (approximating the other's feelings) and compassion (prosocial action as a result of empathy). Unlike Jerrett et al. (2020), we do not focus on mapping games onto a spectrum, based on formalist criteria. Rather, our idea of a spectrum is empirically based, conveying conceptual insights construed from

participant responses. Our findings thus resonate with the broad idea of a dynamic spectrum that replaces rigid taxonomic thought (Halpern 2018) with a more fluid scale of affective states.

Our Narrative Empathy Spectrum (NES, see Figure 6.5) blends neuroscientific findings with qualitative insights from reader data and pragmatic implications of our research question. Similar to Levett-Jones and Cant's (2019) clinical empathy continuum, NES ranges from perception, interest, and curiosity to sympathy (with the possible variant of compassion, as seen in the case of Kate outlined above), and then to cognitive, affective, and associative empathy (Shen 2010). In line with contemporary critical theory (Shuman 2005; James 2022; Pettersson Pecker 2022), our concept of empathy is non-selfish and anti-colonial, and rather indicates strong emotional involvement “with” in the sense of “in favour or support of” characters in the story. Furthermore, since our focus is a narrative, interpretive scenario, we replace the reflective stage positioned by Levett-Jones and Cant (2019) at the end of the teleologically defined mastery process with a reflective metacognitive and metafictional layer that can be accessed by readers at any point on the spectrum. It is indexed by statements like “Wait, should I be angry about this? Is there a different feeling that I should have?” (Kate, 34–35), and it also shows in Ole's survivor's guilt and his reflections about authorial intent. NES is conceptualised as variably static and dynamic, echoing data that suggested movement through different stages, or degrees of emotional responses.

Figure 6.5 shows where we situate individual participants on the NES. Those sitting towards the left on the spectrum were generally critical of the VR experience as a whole. They found it glitchy, had issues with the controls, or felt deprived of their narrative agency (Matthew; Stephen). Matthew's ambimedial response in which he compares *TBoD* with theatre, for instance, explicates that the character-directed feelings he perceives to be intended by the author did not materialise for him, and that his “enjoyment” (emphatically reduplicated) was primarily caused by the theatricality of the work:

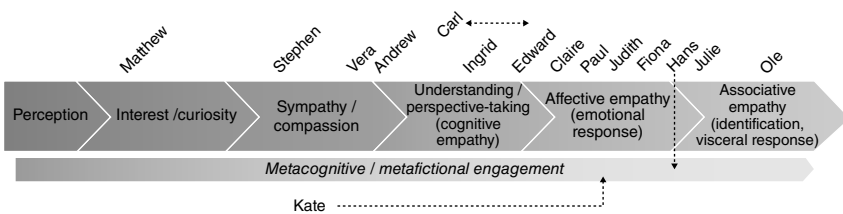


Figure 6.5 Narrative Empathy Spectrum with participants

I have the feeling that this [work] wanted me to be personally connected to the Japanese, both the people and the story and the history but actually, ... that didn't happen so much. Right? But ... I enjoyed the theatre side of it, as the theatre, more than the story. ... There was enjoyment, there *was* enjoyment.... But I cannot say that this helped me understand, cerebrally, intellectually, what happened in Japan and Canada.

(Matthew, 320–332)

We therefore position Matthew in the low interest/curiosity area vis-à-vis the characters. He did not reach a stage of sympathy, compassion, or empathy. Importantly, however, and as a frequent theatre-goer, he showed a strong emotional response to the mechanical design and the setting of the work.

On the opposite side of NES sits Ole, whose strong, visceral response and explicit identification with Yonezo we discussed in the previous section. Figure 6.5 further shows that the majority of our participants are bundled in the cognitive and affective empathy regions. For example, Hans' response to the question what feelings the story generated for him suggested strong affective involvement, reflected by a combination of an emotive interjection (“oh wow”), an emphatic degree modifier (“so many”), and a spontaneous enumeration of affective nouns: “Oh wow, so many. Joy, sadness, expectation, surprise, horror, fun, is that a feeling? It's a bit difficult” (229–230). The interrogative and hedged indicative (“it's a bit”) again signals metacognitive engagement, marked with an arrow in the graph. Hans was evidently wondering about his own lexical choices and the cognitive ambiguities and limitations attached to them.

Individuals placed primarily in the cognitive empathy region expressed their understanding of the characters' situation to different degrees. Carl, for example, explained that he did not have “a lot” of feelings:

not really. I guess the strongest feeling I had was when hearing that the government had sold the farm, that sort of pissed me off a bit. But ... I would have felt the same way if I had seen that in a documentary or if I, you know. So I don't know if the VR part of it did anything emotional.

(Carl, 151–155)

Carl's ambimedial response in which he notes the documentary element of *TBoD* shows a blending of cognitive and affective empathy (see Shamay-Tsoory et al. 2009; Nathanson 2003), although the effect is limited and restricted to one particular scene in the narrative. His brief excursion into affective territory is marked with a bidirectional arrow in Figure 6.5, which again shows the dynamic nature of NES.

Our empirical findings and the NES proposed above confirm Bang and Yildirim's (2018) observation that it is not necessarily the medium-specific qualities of VR that evoke empathy. Indeed, the qualitative findings presented throughout this chapter demonstrate a more complex, contingent picture in which reader circumstances affect empathy as well as the fact that empathy can shift to different characters and in different parts of the same text. Our NES thus offers a fine-grained picture of the contingent and multidimensional qualities of a narrative VR experience.

## **Conclusion**

As a fully embodied, 360-degree immersive environment that can simulate natural and human-made environments in radically variable degrees of realism and abstraction, VR has only just entered the territory of narrative experimentation. It is not surprising therefore that readers may need to (re) orientate themselves medially, ontologically, and emotionally in order to make sense of this new form of narrative media and that associated cognitive models need to be adjusted to capture their experiences.

We have shown that *TBoD* exhibits the “dual narrative structure” of autofictional texts more generally in terms of its merging of narrative roles and identities. However, as a piece of VR fiction specifically, *TBoD* uses its digital, immersive affordances to medium-specifically map hybrid ontological spaces that can transcend, bridge, and rupture diegetic positions and spheres, thus affording proximity and distance to varying degrees, and can conflate author and narrator on the one hand and reader and narratee on the other. We have thus demonstrated that two new narratological categories – medium-specific spatial double-deixis and metafictional embodied metalepsis – are needed to more accurately capture the ontology of the VR experience as evidenced by our participants. These new categories act as a corrective to existing theories of presence as a monolithic immersive effect of VR technologies and their sensory stimuli.

This chapter also provides further evidence for the claim made throughout this book that mediality and medium specificity lie at the heart of narrative phenomenology and need to be accounted for in any discourse model of reading. To account for the sustained way that readers use references to other media to make sense of their reading experience, we introduced “ambimediality” as a term that captures the ambivalent and ambient contingencies that are specific to readers' responses to *TBoD* in particular and to the multi-, inter-, and transmedial affordances of VR as a narrative medium in general.

Against a critical backdrop in empathy research that has questioned its inherently colonialist, delusional, and/or selfish undertones, our study contributes to a more differentiated understanding of the term as well as the



very contingencies underlying VR users' ability to develop empathy. Echoing McDonald's (2022) suggestion that the problematic idea of "feeling with" should be replaced with the more altruistic and equitable notion of "feeling sideways", we have adopted a broader concept of empathy as a scalable and dynamic form of affective response that can be directed at a multitude of major and minor characters. We have therefore sharpened our argument against the widely held empathy machine hypothesis, which is dually problematic in its assumption that empathy can be equated to a mapping of feelings between protagonist and reader, and in its essentialist implication that empathy is a straightforward, monolithic as well as VR-inherent quality. We provided data that show the importance of considering technological, environmental, and embodied factors impacting the physical, materially embedded reading experience of VR more generally. We have also demonstrated that personal situatedness needs to be taken into account, including for example family histories, as well as, perhaps most strongly, biographical and geographic factors, including previous knowledge and visceral experience of the events that are fictionalised in a text.

Throughout the chapter, we have provided further evidence that empathy is not an absolute concept that can be clearly juxtaposed with sympathy or identification. Rather, empathy is an "elastic" term that is immune to inflated conceptions of VR's "ability to change attitudes beyond what is plausible or demonstrable" (Murphy 2022: 488). In doing so, our work supports Halpern's (2018: 135) ethical concern that such taxonomisations can convey a sense of ideological purism that erases readers' and researchers' biases and situated constraints. Echoing findings in neuroscience and health education, we counter-proposed a Narrative Empathy Spectrum that schematises the staggered and dynamic qualities of affective responses we obtained from readers of *TBoD*. We showed how discursive evidence can indicate where on the spectrum participants positioned their affective response, and that these self-locations can be static or dynamic. We also demonstrated that, in the case of *narrative* empathy, an important additional layer needs to be added to the spectrum that accommodates readers' metafictional and metacognitive reflections about their own emotive responses.

Overall, we have demonstrated how qualitative research on VR fiction can shed new light on theories of such key narratological concepts as empathy as well as medium-specific reading and narrative roles. As our results show, we cannot assume that, in VR fiction, even when it centres on the biography of a dominantly represented protagonist and/or narrator, individual readers will remember or care for those same characters to the same degree. Therefore, studies that fail to provide qualitative data about

respondents' individual responses to individual (major and minor) characters are running the risk of overgeneralising or even misrepresenting empathic processes.

## Notes

- 1 Narrative empathy can also relate to author empathy and production aesthetics, which is, however, not the focus of our empirical work.
- 2 The full dataset is held by the University of Bergen and available on request.

# 7 Conclusion

## Medially Reading Digital Fiction

### Introduction

In this book, we have pioneered a third wave of digital fiction scholarship – namely empirical approaches that investigate the medium-specific ways that readers cognitively process digital-born fictions. We have adapted key tenets and analytical principles of narrative and stylistic theories to the medium-specific, procedural affordances of digital fiction and introduced new approaches, concepts, theories, and tools required by these affordances. We have thus made significant contributions to cognitive and transmedial narratology, stylistics, empirical literary studies, and digital media scholarship.

The studies presented in each chapter were conducted independently from one another, in different places, and with different sets of participants. Taken together, however, the results show important new analytical, theoretical, and methodological insights that illuminate the significance of qualitative research in empirical literary and narrative studies as well as the various ways that readers read in digital contexts. Our research thus contributes a more nuanced understanding of the medium-specific and transmedial nature of reading digital-born fiction. Simultaneously, this book offers a new theory of contemporary reading more generally, which we call “medial reading” because it reframes reading as an unconditionally medium-conscious and medially contingent process. Furthermore, our empirical studies collectively highlight the importance of taking into account how readers are positioned in digital fictions, and what kinds of orientational effects specific spatial, audiovisual, and textual designs can entail. In this chapter, we highlight the original methodological, analytical, and theoretical contributions we have made throughout this book and propose ways in which our findings can be used in the future to support the investigation of other digital fictions as well as narratives across media.

## Methodological Innovations

The new reader-response methodology we have developed and applied in this book extends and adapts Bortolussi and Dixon's (2003) psychonarratological approach to print fiction to make it transmedial. Offering a systematic approach to both a text and readers' responses to it, we have synthesised medium-specific analysis (Hayles 2004) of "textual features" with the medium-conscious analysis of "reader constructions". The latter were derived and, as we recount below, extended from Phelan's (2005) and Peplow et al.'s (2015) response types to provide empirically substantiated cognitive insights into how readers process digital fiction. The application of our methodological approach has shown how readers respond to hyper-text fiction, hypermedia fiction, literary games, app fiction, and VR fiction. By applying the innovative approach across five generations of digital fiction, we have demonstrated the flexibility and dexterity of our methodology for examining texts produced at different times and with different software.

Each analysis chapter has also proposed a new mixed-method protocol for gathering reader data, thus innovating the range of tools available for reader-response research. In Chapter 2, we created a 5-point Likert scale, based on existing typologies of "you", to measure reader identification with second-person narrative, combined with a structured interview to elicit qualitative data about the perception of identification. Chapter 3 profiled a new stop-and-go think-aloud protocol in which we asked readers to explain their navigational choices and associated expectations about individual hyperlinks. This chapter also showed the benefits of collaborating with a digital fiction author to create a new work that can be used both for empirical research and as a standalone piece of fiction available to general audiences. Chapters 4 and 5 both proposed protocols for working with reading groups, either with or without the presence of a researcher. Unlike the other three protocols proposed in this book, the reading-group discussions were not designed to take place alongside or immediately after readers had individually read the texts, thus allowing for a more reflective as well as jointly negotiated discussion about the experience. Chapter 6 introduced a structured interview protocol for understanding how readers orientate in relation to VR as well as ways in which they might potentially empathise with characters in that context. Not only do these five protocols add to the field of empirical cognitive studies by offering ways of working with readers and their associated responses, but they also innovate digital fiction scholarship by profiling the methods associated with an emergent third wave of research.

From a broader methodological perspective, it is important to note that each protocol was designed to elicit sustained, spontaneous talk about the

texts and associated reading experiences. While we utilised methods typically associated with both naturalistic (e.g., reading groups, online reviews) and experimental (e.g., interviews, think aloud, Likert scales) paradigms, our overarching approach was intentionally qualitative. We took a combinatorial approach to the thematic coding of all datasets, looking deductively for evidence of existing theories, typologies, and models as well as inductively coding for emerging themes. We examined readers' responses via a discourse analytical approach to show how the language that readers use to talk about their experiences of reading can reveal the ways in which they conceptualise that experience. Thus, we have demonstrated the benefits of a data-driven qualitative approach for yielding substantive insights into perceptions of reading digital fiction as well as other types of media.

### Analytical Insights

Our five studies focussed on narrative, linguistic, and interactive devices that were exemplified by each text. By combining the analysis of textual features and reader constructions, we have offered innovative analyses of the digital fictions by showing how readers respond to and cognitively process their salient linguistic, multimodal, and participatory characteristics.

In Chapter 2, we showed how Larsen and geniwate's (2003) hypermedia fiction *The Princess Murderer* remediates the folk tale of Bluebeard, using consistent doubly deictic and actualised address "you" (Herman 2002) to potentially incriminate the reader in the killing of princesses. Applying and extending theories of "you" as developed by Walker (2000), Bell (2022), and Sorlin (2022), our empirical study showed how most readers resisted the invocation of them as "you", while also recognising that there was an inevitable referential force brought with the second-person address that made them feel at least partly complicit.

In Chapter 3, we showed how Lyle Skains' (2017) hypertext fiction *The Futographer* uses the multilinear and participatory affordances of hypertext to explore issues around social media, computer-mediated communication, online anonymity, and privacy. Through the textual analysis of hyperlinks and reader responses, we have shown that readers strategically utilise the potentially disruptive semantic and structural effect of hyperlinks in this text by reading for the plot (cf. Brooks 1984).

Chapter 4 demonstrated how Campbell and Alston's (2015) 3D literary game *WALLPAPER* uses immersive multimodality to probe and thematise the nature of memory and the complexities of family history. Using a cognitive deictic framework (Stockwell 2020) to analyse both textual features and reader constructions, the study showed that readers were immersed variably depending on their proclivity for and experience of ludic or literary experiences and that immersion is a multidimensional and dynamic

process in which readers are pushed into and popped out of the storyworld at various times and by different narrative and interactive devices.

Chapter 5 examined Blast Theory's (2015) app fiction *Karen* to show how it models and problematises the way that computer-mediated relationships can be formed with someone whose ontological status is ambiguous. Using Bell's (2021) theory of "ontological resonance", which illustrates how reading a fictional work can result in a prolonged response and aura of significance, we showed how some readers of *Karen* enjoyed the interactions with Karen as a playful form of entertainment while others questioned the ethics of the experience.

In Chapter 6, we argued that Okita's (2020) VR fiction *The Book of Distance* can be seen as a medium-specific form of allofiction (Mortimer 2009), a subtype of autofiction. In addition to the typical autofictional ontological merging of character and author, we showed how the reader was also implicated in the storyworld via the VR technology, while the straightforward concept of presence needs qualifying and refining in light of readers' perception and experience of spatialised, ambimedial ontologies. We investigated the degrees to which readers empathised with various characters, concluding that personal situatedness, including family histories, biographical and geographic factors, affect readers' ability to empathise, including in so-called empathy media like VR.

### Theoretical Advancements

As the preceding section shows, we have drawn on existing narrative and stylistic theories to analyse textual features and reader constructions. However, it has also been necessary to develop existing and create new theoretical concepts to accurately and comprehensively capture the digital fiction reading experience.

### Medial Reading

We have shown evidence throughout the data of Phelan's (2005) and Peplow et al.'s (2015) mimetic, synthetic, and thematic responses, confirming that their synthesised models can be empirically operationalised for the analysis of digital fiction reading and are thus transmedial. However, our medium-conscious reader-response methodology, introduced in Chapter 1, further develops the original frameworks to rectify what we see as medium naivety. Aligning with Hayles and Pressman's (2013) contention that medium is essential to the study of any text type, we have argued that our new concept of "medial" response and associated "medial reading" is integral to any reading experience and should therefore be incorporated into the framework for use across media.

“Medial” responses account for an audience’s interest in, awareness of, and/or attention to the medium in which a text is produced and received. This includes the medium-specific affordances inherent in the technologies used and their site-specific, embodied implications for reader interaction across media. We have proposed that medial reading is related to but distinguished from synthetic readings of texts, which tend to focus on the style in which a text is written, and/or the narrative textual devices employed. Medial readings of a text instead relate to devices that are afforded by and distinctive of the medium in which the text is written. While medial readings can be generated in response to all kinds of text across historical periods, fictional genres, and types of media and are thus relevant to viewers, players, listeners as well as readers of text, we largely discarded hyphenated concepts that reflect medial augmentation (such as “reader-player”, “reader-user”, etc.). Instead, we propose a holistic concept that assumes engagement with all texts involves “reading” signs of some kind. Reading across all media is necessarily medial and material in the sense that texts generate responses that are at least partially stimulated by the medium specifics of the reading encounter, irrespective of whether the reader is consciously aware of that aspect of the experience or not. Awareness of or attention to medial aspects of reading is non-trivial, complex, and dynamic, and generated by responses to the verbal, semiotic, and material affordances of any form of fiction that is ultimately dependent on its medium specificity.

With respect to digital fiction specifically, we have shown that medial readings can be medium-consciously logocentric and/or multimodal as well as exhibiting awareness of the medium-specific materiality of the reading context. Medial reading thus includes commenting on the navigational idiosyncrasies of digital reading such as clicking a mouse (e.g., Chapter 2), choosing a link (e.g., Chapter 3), or controlling an avatar (e.g., Chapters 4 and 6); talking about hardware such as screens (e.g., Chapter 2), phones (e.g., Chapter 5), or VR headsets (e.g., Chapter 6); and/or being aware of the situatedness of the reading context, including the capacity for extratextual features, such as ambient sounds, to become part of the experience (e.g., Chapter 4).

We have shown that, like Phelan’s and Peplow et al.’s response types, medial responses are not necessarily experienced in isolation from other kinds of response but rather reciprocally shape and are shaped by readers’ thematic, mimetic, and synthetic responses. This occurs when readers notice the way that language is affected by the medium-specific context in which it is being used, as exemplified by readers’ awareness of the cybernetic feedback loop in which they are integrated and which is augmented by ubiquitous and diverse uses of “you” (Chapters 2, 3, and 5).

While our notion of medial responses and the medial reader has been developed in relation to digital fiction, we argue that any empirical study

that examines reading should be medium conscious and therefore deploy and/or develop these new concepts. Future empirical research about readers of all text types should thus take account of medial responses. This could include, for example, paying attention to reader responses to the effect of paper and/or binding on their experience of reading a novel (e.g., the smell and weight of a book) and/or the effect of watching a motion picture in different formats (e.g., an 8mm versus a digitally produced film). Such an approach reflects findings in New Literacy Studies which recognise the plurality of literacies across space, time, and social practices (Gee 2015) and firmly positions fiction writing and reading in the realm of media and technology studies. Our empirical findings and associated discursive position thus reflect and confirm a general trend in so-called “Literary Media Studies” (Ensslin et al. 2023; Hayles 2008) that conceptualises “literary” as inter- and transmedial and casts narrative studies as an inherently cross-disciplinary field that needs to be informed by theories, methods, and creative practices from media arts and media studies to allow a fully rounded understanding of contemporary reading and fictional verbal arts.

### *Hypertextual Reading*

Chapter 3 demonstrated that hyperlinks are a fundamental part of digital reading and that various attempts have been made to categorise their form and orientating function relative to individual or corpora of hypertext. We showed that some taxonomies were limited because of the evidence on which they were based (Parker 2001) and that others replicated link types and could thus be harmonised (e.g., Ryan 2006, 2015). Building on and further developing cognitive approaches that model the anticipatory and retrospective nature of reading links (Tosca 2000; Bell 2014), the new meta-typology that we proposed shows how links can be distinguished on the basis of their narrative and affective function as well as their navigatory versus exploratory purpose, and also that readers anticipate and retrospectively assimilate the link–lexia relationship. The validity of our new theory of hyperlinks was verified via our empirical study on *The Futographer*. However, given that the meta-typology was partly developed via the systemisation and consolidation of links from other hypertext fictions, we predict that it will be applicable to other works and reader responses to them.

### *Multidimensional Immersivity*

In Chapter 4 we critically appraised and consolidated theories of immersion (Thon 2008; Calleja 2011; Ryan 2015) and created a taxonomy of immersion types that could be observed in textual features and reader



constructions to show how readers orientated to and within the storyworld. The analysis of *WALLPAPER* showed that while all existing immersion types were relevant to the readers' experiences, it was necessary to further develop the concept of immersion to more accurately capture the multimodal, multimedial, and multidimensional nature of immersion in digital fiction. We proposed three new categories of immersion: (1) literary immersion, which occurs when readers pay close and often critical attention to reading written materials in the digital storyworld; (2) aesthetic immersion, which occurs when the aesthetics of the game solely leads to or else enhances other forms of immersion; and (3) collaborative immersion, which occurs when the actions or contributions of other people co-experiencing the fiction enhance other forms of immersion for the reader. We showed that while these types of immersion are not necessarily new concepts, insofar as readers can become immersed in close reading texts and aesthetic qualities, or by other players across media, they had not been flagged as a distinctive type of immersion in existing research.

Our research confirms and expands theories that explain how the environment in which a printed text (Kuzmicřová 2016) or videogame (Calleja 2011) is experienced can affect engagement with and immersion in it. In Chapter 4, we proposed the two new categories of paratextual and incidental environmental propping to account for the way that immersion in a storyworld can be created by scripted and/or incidental or non-planned extratextual features respectively. Chapter 6, on the other hand, showed the capacity for a reading environment to preclude engagement with a text by distracting and thereby anchoring the reader in the actual world and away from the storyworld. While we have shown the significance of these material extratextual contexts in digital fiction reading, as the preceding references to wider medial research show, it is likely that they enhance and impede engagement and/or immersion across media.

In addition to showing the ways in which immersion has been and can be theorised according to different types, our empirical work also demonstrated how immersion is stimulated by multiple immersive features which interact with each other, with readers pushed into and popped out of a storyworld at various times during their encounter with the text. We have thus shown that contrary to current theories that define immersion as a totally enveloping experience, readers move in and out of different aspects of digital fiction storyworlds and/or are immersed in different ways and to varying degrees. To explain this phenomenon, we developed the metaphor of a mixing console and resultant audio layering to more accurately frame the multidimensional, dynamic, con- and divergent, mutually responsive, and partly competing qualities of immersion. We have also demonstrated that spatiotemporal immersion is the most pervasive and fundamental type of immersion, which must be established before any other form of immersion can ensue.

While the new concepts that we offered in Chapter 4 are derived from reader constructions of immersive experience in *WALLPAPER*, we suggest that the three new forms of immersion are likely to be experienced in relation to other multimodal, multimedial and/or collaboratively experienced texts, and that dynamic multidimensionality is an integral part of any multimodal reading experience that leads to immersion.

#### *Automimetic, Parasocial, and Ambimedial Responses*

Our analyses of reader constructions throughout the chapters showed that there were responses to the texts that were not all captured by the medium-conscious methodology established in Chapter 1. It was thus necessary for us to develop three new categories of responses to account for them.

In Chapter 2, we showed how readers commented on the viability of “you” as a character and/or reader and thus the extent to which they authentically identified with the characteristics described in the text. To account for this phenomenon, we defined the new concept of automimetic response as an audience’s interest in and response to the way in which a text’s representation of them as “you-as-reader” corresponds to them and/or is believable. This same response was observed throughout the other chapters, demonstrating that this category is relevant and applicable to responses beyond *The Princess Murderer* case study in which it was originally developed. We would also speculate that this is a transmedial category that can be felt when reading other texts that use narrative devices such as “you” and “we” to invoke the reader linguistically, or which place the reader in the storyworld as a participant, as for example in live action role play (LARP).

In Chapter 5, we observed readers reflecting on the nature of their relationship with the protagonist from the app fiction *Karen*. We drew on theories of parasocial interaction (Horton & Wohl 1956) to develop the new concept of parasocial response. This new response type captures an audience’s response to and interest in the relationships they form with characters in a fictional narrative. Since parasocial response relates to the way that audiences treat characters as though they are real, and since Phelan’s existing category of mimetic reading already “involve[s] an audience’s interest in the characters as possible people and in the narrative world as like our own” (Phelan 2005: 20), we proposed parasocial response as a subcategory of mimetic response. We did not observe this kind of response in any other dataset. However, parasocial response is likely to be most readily stimulated by texts that put the reader in sustained dialogue with a character and is thus most felt in response to texts, like *Karen*, where that is a salient feature. In other contexts, this could include dialogue with

fictional characters on social media as occurs in, for example, fourth-generation digital fictions *The Sun Vanished* (Elliott 2018) or *I Work for the Web* (Wittig & Marino 2015). It could also be extended to investigating readers' experiences of non-digital narratives such as immersive, participatory theatre, where audience members interact with characters throughout the performance and potentially form a parasocial relationship with the characters.

Chapter 6 showed extensive evidence of readers attempting to make sense of their VR reading experience via recourse to other media. This comprised diverse text types including verbal, audiovisual, and aural forms. To capture this kind of response, we created the category of ambimedial response which relates to readers' inter-, trans-, multimedial references as they attempt to reconcile an unfamiliar medial experience with more familiar reading situations. The prefix "ambi" encapsulates notions of both ambivalent and ambient, combining intermedial anchorings with the notion that narrative comprehension and processing happen relative and as a response to the environmental, embodied, social, and biographical embeddedness of each individual reader. Ambimedial reading is not necessarily medium specific to VR and thus the concept can be extended across media, but the newness of the VR reading experience and the multiple medial embedding inherent to VR are ideally disposed to afford ambimedial reading.

### *Reader Positioning*

Throughout the book, we have shown how a reader can be positioned in relation to or within a digital fiction storyworld as a consequence of its inherently interactive nature. Where existing models were unable to accurately account for those positions, we developed medium-specific and transmedial versions or alternatives.

### *Double and Triple Positioning*

In each chapter, we empirically operationalised Ensslin's (2009) concept of double-situatedness which explains the way that readers can be embodied as direct receivers, whose bodies interact with the hardware and software of a computer, and also re-embodied through feedback which they experience in represented form. We have also found evidence of what we define as "doubly deictic I", in which readers report their doubly situated experiences of navigating a storyworld using the first-person singular pronoun. The relevance of these concepts across the datasets suggests that they are generalisable phenomena that can be applied to doubly situated reader discourse across digital media. We suggest that evidence of "triple deictic

you” in which we observed “you” used to refer to an avatar in the storyworld, the reader in the actual world, and a “generalized” (Herman 2002: 340) collective audience at the same time is also likely to be observed when readers are talking about their experiences of a text to other readers who they assume have had the same experience. However, further empirical research would test the viability of this claim across digital texts of all kinds.

The way in which a reader of digital fiction can feel part of more than one ontological domain at the same time was further developed in Chapter 6. Our new concepts of medium-specific spatial *double*-deixis showed how readers of VR can construct their situated identity as both intradiegetic and diegetic at the same time, and medium-specific spatial *triple*-deixis as extratextual, diegetic, and intradiegetic simultaneously. Our concept of dual embodied metalepsis also accounts for cases where readers feel doubly situated and reflect this ontological dilemma by conflating conventionally separate roles of narrator and author while remaining deictically anchored both within the storyworld and the actual world. Future research could determine if these are VR-specific phenomena related to the reader’s visual occlusion from but corporeal position in the actual world or whether they are more generalisable experiences in digital media.

### *Identity Positions*

In Chapters 2 and 5, we developed a model of reader self-positioning to reflect the way that readers across those two studies explicitly adopted four relational identity positions in response to doubly deictic and actualised address “you”s: authenticers identify with the “you”s; rejecters refuse to take up the fictionalised position; reluctant role-players reluctantly assume an identity or characteristic associated with “you”; and willing role-players gratifyingly adopt an identity or characteristic associated with “you”, usually for fun. While we developed this model in relation to digital fiction, we suggest that it also applies to other forms of second-person participatory fiction such as choose-your-own-adventure print fiction and alternate reality games (ARGs).

### *Ethical Positions*

In Chapter 5, we showed how Phelan’s (2005) model of ethical positioning, which was originally developed in relation to print fiction, could not fully account for the ethically engaged responses to *Karen*. In particular, we showed the necessity of including readers’ ethical stance in relation to their contributions to a storyworld as well as the ethics of the authors’ use

of reader contributions. By extending Phelan's framework, we have created a transmedial model that we suggest can be applied to texts that invite what we have characterised as both psychological and participatory ethical positioning. While the former is an integral part of any fictional reading experience insofar as it involves ethical judgements about textual elements that cannot be influenced by the reader, the latter involves ethical responses to a reader's interactive, participatory involvement in the narrative. We suggest that our new transmedial model of ethical positioning can be applied to other forms of participatory fiction.

### *Empathic Positions*

Chapter 6 showed how current theories of empathy that do not account for important contingencies in individual users, or which propose an absolute distinction between affective categories like empathy, sympathy, and identification, were not able to fully account for reader responses to the VR fiction *The Book of Distance*. We thus proposed a critically informed Narrative Empathy Spectrum that better represented the staggered and dynamic qualities of reader empathic responses. We showed how qualitative evidence from the reader data can be used to show where the participants sit on the spectrum, but also that these positions are not necessarily static but can move according to which part of the text the readers are reporting on, and/or alongside readers' reflection process. We also demonstrated that an additional layer needed to be added to the spectrum to accommodate readers' metafictional and metacognitive reflections about their own emotive responses. We suggest that the Narrative Empathy Spectrum should be tested on a wider corpus of reader data to show the wider applicability of our new approach.

### **The Future of Digital Fiction Scholarship**

Synthesising the narratological and stylistic analysis of textual features with the qualitative analysis of reader constructions has also allowed us to refine and qualify existing theories, models, and typologies by showing the ways in which readers cognitively process digital fiction. Overall, we have profiled and further developed methodological frameworks and theoretical concepts, typologies, and models that have been designed to account for the affordances of digital media as well as developing tools from narratology and stylistics that have been established via the analysis of other media, so that they can account for the multimodal, interactive, procedural, and participatory nature of digital fiction. Central to our approach has been awareness of and attention to the medium-specific and transmedial

qualities of the texts under investigation. We argue that analysts and theorists of all text types should reflect on and act as medial readers. We see our work as advancing the expanding third wave of digital fiction research (see, e.g., Loi et al. 2023) as well as empirical approaches to narrative more broadly. We hope that the contributions we have made in this book will enable future research to examine other texts across existing and future generations of digital fiction as well as other narratives across media.

# References

- Aarseth, E. (1997) *Cybertext: Perspectives on Ergodic Literature*. Baltimore, MD: Johns Hopkins University Press.
- Abba, T., Dovey, J., and Pullinger, K. (Eds.) (2021) *Ambient Literature: Towards a New Poetics of Situated Writing and Reading Practices*. London: Palgrave Macmillan.
- Alber, J., Jumpertz, J., and Mayer, A. (2020) "How Professional Readers Process Unnatural Narrators: An Empirical Perspective." *Scientific Study of Literature* 10(2): 193–213.
- Alber, J., and Strasen, S. (Eds.) (2020) Focus on Empirical Approaches to Narrative, special issue of *Anglistik* 31(1).
- Alderman, N., and Levene, R. (2012) *Zombies, Run!* London: Six to Start.
- Andringa, E. (1990) "Verbal Data on Literary Understanding: A proposal for protocol analysis on two levels." *Poetics* 19: 231–57.
- Bang, E., and Yildirim, C. (2018) "Virtually Empathetic?: Examining the Effects of Virtual Reality Storytelling on Empathy." In *Virtual, Augmented and Mixed Reality: Interaction, Navigation, Visualization, Embodiment, and Simulation*. VAMR 2018, edited by J. Chen and G. Fragomeni. Lecture Notes in Computer Science, vol. 10909. Cham: Springer.
- Barbara, J., and Haahr, M. (2021) "Who Am I that Acts? The Use of Voice in Virtual Reality Interactive Narratives." In: *Interactive Storytelling. ICIDS 2021. Lecture Notes in Computer Science*, vol 13138, edited by A. Mitchell and M. Vosmeer. Cham: Springer.
- Barlow, S., and Bee, F. (2019) *Telling Lies*. Annapurna Interactive
- Barthes, R. (1990 [1974]) *S/Z*. Translated by Richard Miller. Oxford: Blackwell.
- Batson, C. D. (1991) *The Altruism Question: Toward a Social Psychological Answer*. Hillsdale, NJ: Erlbaum.
- Bell, A. (2010) *The Possible Worlds of Hypertext Fiction*. Basingstoke: Palgrave-MacMillan.
- Bell, A. (2014) "Schema Theory, Hypertext Fiction and Links." *Style* 48(2): 140–161.
- Bell, A. (2021) "'It All Feels Too Real': Digital Storyworlds and Ontological Resonance." *Style* 55(3): 430–52.
- Bell, A. (2022) "'You Know, Are You You?': Being versus Playing the Second-Person in Digital Fiction." In *The Rhetoric of Literary Communication: From Classical English Novels to Contemporary Digital Fiction*, edited by V. Iché and S. Sorlin. Routledge, 179–94.

- Bell, A., Browse, S., Gibbons, A., and Peplow, D. (Eds.) (2021) *Style and Reader Response: Minds, Media, Methods*. Amsterdam: John Benjamins.
- Bell, A., and Ensslin, A. (2011) "I Know What It Was. You Know What It Was': Second-Person Narration in Hypertext Fiction." *Narrative* 19(3): 311–29
- Bell, A., Ensslin, A., Ciccoricco, D., Laccetti, J., Pressman, J., Rustad, H. K. (2010) "A [S]creed for Digital Fiction." *Electronic Book Review*. <http://www.electronicbookreview.com/thread/electropoetics/DFINative>
- Bell, A., Ensslin, A., and Rustad, H. K. (Eds.) (2014) *Analyzing Digital Fiction*. New York: Routledge.
- Bell, A., Ensslin, A., van der Bom, I. & Smith, J. (2018) "Immersion in Digital Fiction." *International Journal of Literary Linguistics* 7(1), <https://doi.org/10.15462/ijll.v7i1.105>
- Bell, A., Ensslin, A., van der Bom, I., and Smith, J. (2019) "A Reader Response Method Not Just For 'You'." *Language and Literature* 28(3): 241–262.
- Benwell, B. (2009) "'A Pathetic and Racist and Awful Character': Ethnomethodological Approaches to the Reception of Diasporic Fiction." *Language and Literature* 18(3): 300–316.
- Berens, K. I. (2019) "Third Generation Electronic Literature and Artisanal Interfaces: Resistance in the Materials." *Electronic Book Review*, <https://doi.org/10.7273/c8a0-kb67>
- Bernaerts, L., de Geest, D., Herman, L., and Vervaeck, B. (Eds.) (2013) *Stories and Minds: Cognitive Approaches to Literary Narrative*. Frontiers of Narrative Series. Lincoln, NE: University of Nebraska Press.
- Bernstein, M. (1998) *Patterns of Hypertext*. Watertown, MA: Eastgate Systems. <http://www.east-gate.com/patterns/Print.html>
- Blast Theory. (2015) *Karen*. <https://apps.apple.com/gb/app/karen-by-blast-theory/id945629374/> <https://play.google.com/store/apps/details?id=com.blasttheory.talktome&hl=en>
- Blast Theory. (n.d.) *Karen*. <https://www.blasttheory.co.uk/projects/karen/>
- Bolter, J. D. (1991) *Writing Space: The Computer, Hypertext, and the History of Writing*. Hillsdale, NJ: Lawrence Erlbaum.
- Borghi, A., and Cimatti, F. (2010) "Embodied Cognition and Beyond: Acting and Sensing the Body." *Neuropsychologia* 48: 763–773.
- Bortolussi, M., and Dixon, P. (2003) *Psychonarratology: Foundations for the Empirical Study of Literary Response*. Cambridge: Cambridge University Press.
- Bourg, Tammy (1996) "The Role of Emotion, Empathy, and Text Structure in Children's and Adults' Narrative Text Comprehension." In *Empirical Approaches to Literature and Aesthetics*, edited by R. Kreuz and M. S. MacNealy. Norwood: Ablex, 241–60.
- Bowman, N. D., Weber, R., Tamborini, R., and Sherry, J. (2013) "Facilitating Game Play: How Others Affect Performance and Enjoyment of Video Games." *Media Psychology* 16(1): 39–64.
- Brandmayr, B. (2020) "Discourse Analysis." In *Analyzing Group Interactions: A Guidebook for Qualitative, Quantitative and Mixed Methods*, edited by M. Huber and D. E. Froehlich. New York: Routledge, 60–70.
- Breeze, M., and Campbell, A. (2018) *Perpetual Nomads*. <https://www.mezbreezedesign.com/vr-literature/perpetual-nomads-360/>



- Brennen, B. S. (2022) *Qualitative Research Methods for Media Studies*. London: Routledge.
- Brinck, I. (2018) "Empathy, Engagement, Entrainment: The Interaction Dynamics of Aesthetic Experience." *Cognitive Processing* 19(2): 201–2013.
- Brône, G., and Vandaele, J. (Eds.) (2009) *Cognitive Poetics: Goals, Gains, and Gaps*. Berlin: Mouton de Gruyter.
- Brooks, P. (1984) *Reading for the Plot: Design and Intention in Narrative*. New York: Knopf.
- Brown, W. J. (2015) "Examining Four Processes of Audience Involvement with Media Personae: Transportation, Parasocial Interaction, Identification, and Worship." *Communication Theory* 25(3): 259–83.
- Browse, S. (2021) "Towards an Empirical Stylistics of Critical Reception: The Oppositional Reader in Political Discourse." In *Style and Reader Response: Minds, Media, Methods*, edited by A. Bell, S. Browse, A. Gibbons, and D. Peplow, 61–80.
- Brunyé, T. T., Ditman, T., Mahoney, C. R., Augustyn, J. S., and Taylor, H. A. (2009) "When You and I Share Perspectives: Pronouns Modulate Perspective-Taking During Narrative Comprehension." *Psychological Science* 20: 27–32.
- Brunyé, T. T., Ditman, T., Mahoney, C. R., et al. (2011) "Better You than I: Perspectives and Emotion Simulation During Narrative Comprehension." *Journal of Cognitive Psychology* 23(5): 659–66.
- burrough, x. (2021) *I Got Up 2020, Pandemic Edition* <https://www.instagram.com/p/CVDijKNLdaT/?utm>
- Busselle, R., and Bilandzic, H. (2009) "Measuring Narrative Engagement." *Media Psychology* 12(4): 321–47.
- Cairns, P., Cox, A., and Nordin, I. A. (2014) "Immersion in Digital Games: Review of Gaming Experience Research." In *Handbook of Digital Games* edited by M. C. Angelides and H. Agius. Hoboken, NJ: John Wiley & Sons, 337–361.
- Calleja, G. (2011) *In-Game. From Immersion to Incorporation*. Cambridge, MA: MIT Press.
- Campbell, A., and Alston, J. (2015) WALLPAPER. <http://dreamingmethods.com/wallpaper>
- Caracciolo, M. (2022) *Slow Narrative and Nonhuman Materialities*. Lincoln, NE: University of Nebraska Press.
- Chatman, S. (1980) *Story and Discourse: Narrative Structure in Fiction and Film*. Ithaca, NY: Cornell University Press.
- Chen, A., Hanna, J. J., Manohar, A., and Tobia, A. (2018) "Teaching Empathy: The Implementation of a Video Game into a Psychiatry Clerkship Curriculum." *Academic Psychology*, 42, 362–365.
- Chen, C. P. (2016) "Forming Digital Self and Parasocial Relationships on YouTube." *Journal of Consumer Culture* 16(1): 232–54.
- Ciccoricco, D. (2007) *Reading Network Fiction*. Tuscaloosa, AL: University of Alabama Press.
- Ciccoricco, D. (2012) "Focalization and Digital Fiction." *Narrative* 20(3): 255–76.
- Ciccoricco, D. (2015) *Refiguring Minds in Narrative Media*. Lincoln, NE: University of Nebraska Press.

- Cixous, H. (1991) *Coming to Writing and Other Essays*. Edited by Deborah Jensen. Translated by Sarah Cornell, Ann Liddle and Susan Sellers. Cambridge, MA: Harvard University Press.
- Clark, M., and Phelan, J. (2020) *Debating Rhetorical Narratology: On the Synthetic, Mimetic, and Thematic Aspects of Narrative*. Columbus, OH: Ohio State University Press.
- Cohn, J. (2021) "The Myth of Virtual Reality." *Docalogue*, <https://docalogue.com/the-book-of-distance/>
- Collins, K. (2013) *Playing with Sound. A Theory of Interacting with Sound and Music in Video Games*. London: MIT Press.
- Coover, R. (1992) "The End of Books." *New York Times*, June 21, 1992. <http://www.nytimes.com/books/98/09/27/specials/coover-end.html>
- Csikszentmihalyi, M. (1990) *Flow. The Psychology of Optimal Experience*. New York: Harper and Row.
- Cummings, J. J., Tsay-Vogel, M., Cahill, T. J., and Zhang, L. (2021) "Effects of Immersive Storytelling on Affective, Cognitive, and Associative Empathy: The Mediating Role of Presence." *New Media and Society* 29(4): 2003–26.
- Dawson, P. (2013) *The Return of the Omniscient Narrator: Authorship and Authority in Twenty-First Century Fiction*. Columbus, OH: Ohio State University Press.
- Decety, J., and Jackson, P. L. (2004) "The Functional Architecture of Human Empathy." *Behavioral and Cognitive Neuroscience Reviews* 3: 71–100.
- Dechering, A., and Bakkes, S. (2018) "Moral Engagement in Interactive Narrative Games: An Exploratory Study on Ethical Agency in *The Walking Dead and Life is Strange*." In *Proceedings of the 13th International Conference on the Foundations of Digital Games*, edited by Steve Dahlskog, Sebastian Deterding, José Font, Mitu Khandaker, Carl Magnus Olsson, Sebastian Risi, Christoph Salge. New York: ACM, 1–10. <https://doi.org/10.1145/3235765.3235779>
- Deleuze, G., and Guattari, F. (1988) *A Thousand Plateaus: Capitalism and Schizophrenia*. Translated by Brian Massumi. London: Athlone Press.
- Derrida, J. (1981) *Dissemination*. Translated by Barbara Johnson. Chicago, OH: University of Chicago Press.
- Dix, H. (2022) "Autofiction." In *Oxford Encyclopedia of Literature*, <https://oxfordre.com/literature/view/10.1093/acrefore/9780190201098.001.0001/acrefore-9780190201098-e-1339>
- Douglas, J. Y. (1994) "How Do I Stop This Thing?" Closure and Indeterminacy in Interactive Narratives." In *HyperText/Theory*, edited by G. P. Landow. Baltimore, MD: John Hopkins University Press, 59–88.
- Driscoll, B., and Rehberg Sedo, D. (2019) "Faraway, So Close: Seeing the Intimacy in Goodreads Reviews." *Qualitative Inquiry* 25(3): 248–59.
- Duchan, J. F., Bruder G. A. and Hewitt, L. E. (Eds.) (1995) *Deixis in Narrative. A Cognitive Science Perspective*. Hillsdale, NJ: Lawrence Erlbaum.
- Eitzen, D. (2021) "The Book of Distance: The power of 'presence'." *Docalogue*, <https://docalogue.com/the-book-of-distance/>
- Elliott. (2018-) *The Sun Vanished*. <https://twitter.com/thesunvanishd>
- Ensslin, A. (2007) *Canonizing Hypertext: Explorations and Constructions*. London: Continuum.

- Ensslin, A. (2009) "Respiratory Narrative: Multimodality and Cybernetic Corporeality in 'Physio-cybertext'." In *New Perspectives on Narrative and Multimodality*, edited by R. Page. London: Routledge, 155–65.
- Ensslin, A. (2014) *Literary Gaming*. Cambridge, MA: MIT Press.
- Ensslin, A. (2020) "Hypertext Theory." In *The Oxford Encyclopedia of Literary Theory*, edited by J. Frow, M. Byron, P. Goulimari, S. Pryor, and J. Rak. Oxford: OUP. <https://doi.org/10.1093/acrefore/9780190201098.013.982>
- Ensslin, A. (2022) *Pre-web Digital Publishing and the Lore of Electronic Literature*. Cambridge: CUP.
- Ensslin, A., and Bell, A. (2012) "'Click = Kill': Textual You in Ludic Digital Fiction." *Storyworlds* 4: 49–74.
- Ensslin, A., and Bell, A. (2021) *Digital Fiction and the Unnatural: Transmedial Narrative Theory, Method, and Analysis*. Columbus, OH: Ohio State University Press.
- Ensslin, A., Bell, A. Skains, L. and van der Bom, I. (2019) "Immersion, Digital Fiction, and the Switchboard Metaphor." *Participations: Journal of Audience and Reception Studies* 16(1): 320–42.
- Ensslin, A., Round, J., and Thomas, B. (Eds.) (2023) *The Routledge Companion to Literary Media*. New York: Routledge.
- Ensslin, A., and Skains, L. (2017) "Hypertext: Storyspace to Twine." In *The Bloomsbury Handbook of Electronic Literature*, edited by J. Tabbi. London: Bloomsbury, 295–310.
- Ermi, L., and Mäyrä, F. (2005) "Fundamental Components of the Gameplay Experience: Analysing Immersion." In *Proceedings of Digra 2005: Changing Views – Worlds in Play*. [https://www.researchgate.net/publication/221217389\\_Fundamental\\_Components\\_of\\_the\\_Gameplay\\_Experience\\_Analysing\\_Immersion](https://www.researchgate.net/publication/221217389_Fundamental_Components_of_the_Gameplay_Experience_Analysing_Immersion)
- Evans, L. (2019) "Barriers to VR use in HE." In *Proceedings of the Virtual and Augmented Reality to Enhance Learning and Teaching in Higher Education Conference 2018*, edited by J. Hudson and R. Kerton. Chichester: IM Publications Open, 3–13.
- Eyal, K., and Cohen, J. (2006) "When Good Friends Say Goodbye: A Parasocial Breakup Study." *Journal of Broadcasting & Electronic Media* 50(3): 502–23.
- Ferchaud, A., and Oliver, M. B. (2019) "It's My Choice: The Effects of Moral Decision-Making on Narrative Game Engagement." *Journal of Gaming & Virtual Worlds* 11(2): 101–18.
- Filter (2021-) *Filter*. <https://www.instagram.com/filterinstazine/>
- Fisher, C. (2001) *These Waves of Girls*. <http://www.yorku.ca/caitlin/waves/>
- Flick, U. (2014) "Mapping the Field." In *The SAGE Handbook of Qualitative Data Analysis*, edited by U. Flick. London: SAGE, 3–18.
- Flick, U. (2018) *An Introduction to Qualitative Research*, 6th edition. London: Sage.
- Flores, L. (2019) "Third Generation Electronic Literature." *Electronic Book Review* <https://doi.org/10.7273/axyj-3574>
- Fludernik, M. (1994) "Second-Person Narrative as a Test Case for Narratology: The Limits of Realism." *Style* 28(3): 445–79.
- Foglia, L., and Wilson, R. A. (2013) "Embodied Cognition." *WIREs Cognitive Science*, 4: 319–325.

- Frieze, J. (Ed.) (2016) *Reframing Immersive Theatre: The Politics and Pragmatics of Participatory Performance*. London: Palgrave Macmillan.
- Gallese, G., and Goldmann, A. (1998) "Mirror-neurons: In Reflection." *Trends in Cognitive Sciences* 2: 493–501.
- Gardner, C. (2003) "Meta-Interpretation and Hypertext Fiction: A Critical Response." *Computers and the Humanities* 2(1): 33–56 <https://journals.tdl.org/jodi/index.php/jodi/article/view/jodi-36>
- Gavins, J., and Steen, G. (Eds.) (2003) *Cognitive Poetics in Practice*. London; New York: Routledge.
- Gee, J. P. (2015) *Literacy and Education*. London: Routledge.
- Genette, G. (1997) *Paratexts: Thresholds of Interpretation*. Cambridge: The University of Cambridge.
- Gerrig, R. J. (1993) *Experiencing Narrative Worlds: On the Psychological Activities of Reading*. New Haven, CT: Yale University Press.
- Gibbons, A. (2011) *Multimodality, Cognition, and Experimental Literature*. London: Routledge.
- Gibbons, A. (2022) "A Cognitive Model of Reading Autofiction." *English Studies*, 103(3): 471–493.
- Giles, D. C. (2002) "Parasocial Interaction: A Review of the Literature and a Model for Future Research." *Media Psychology* 4(3): 279–305.
- Green, M., and Brock, T. C. (2000) "The Role of Transportation in the Persuasiveness of Public Narratives." *Journal of Personality and Social Psychology* 79(5): 701–21.
- Green, M. C., Kass, S., Carrey, J., Herzig, B., Feeney, R., and Sabini, J. (2008) "Transportation Across Media: Repeated Exposure to Print and Film." *Media Psychology* 11(4): 512–39.
- Gualeni, S., and Vella, D. (2020) *Virtual Existentialism: Meaning and Subjectivity in Virtual Worlds*. Cham: Palgrave Macmillan.
- Hall, G. (2008) "Empirical Research into the Processing of Free Indirect Discourse and the Imperative of Ecological Validity." In *Directions in Empirical Literary Studies*, edited by S. Zyngier, M. Bortolussi, A. Chesnokova, and J. Auracher. Amsterdam: John Benjamins, 21–34.
- Halpern, F. (2018) "Closeness Through Unreliability: Sympathy, Empathy, and Ethics in Narrative Communication." *Narrative* 26(2): 125–45
- Harrigan, P., and Wardrip-Fruin, N. (Eds.) (2007) *Second Person: Role-Playing and Story in Games and Playable Media*. Cambridge, MA: MIT Press.
- Hartmann, T. (2008) "Parasocial interactions and new media characters." In *Mediated Interpersonal Communication*, edited by E. A. Konijn, S. Utz, M. Tanis, and S. Barnes, Mahwah, NJ: Erlbaum, 177–199.
- Hartmann, T., and Vorderer, P. (2010) "It's Okay to Shoot a Character: Moral Disengagement in Violent Video Games." *Journal of Communication* 60(1): 94–119.
- Hasson, U. (2017) "This Is your Brain on Communication." *Ideas.Ted.com*, January 27. <https://ideas.ted.com/this-is-your-brain-on-communication>
- Hausken, L. (2004) "Textual Theory and Blind Spots in Media Studies." In *Narrative across Media: The Languages of Storytelling*, edited by M. L. Ryan. Lincoln, NE: University of Nebraska Press, 391–403.

- Hayles, N. K. (2004) "Print Is Flat, Code Is Deep: The Importance of Media-Specific Analysis." *Poetics Today* 25(1): 67–90.
- Hayles, N. K. (2007) "Hyper and Deep Attention: The Generational Divide in Cognitive Modes." *Profession* 13: 187–99.
- Hayles, N. K. (2008) *Electronic Literature: New Horizons for the Literary*. Notre Dame, IN: University of Notre Dame Press.
- Hayles, N. K., and Pressman, J. (Eds.) (2013) *Comparative Textual Media: Transforming the Humanities in the Postprint Era*. Minneapolis, MN: Minnesota University Press.
- Healey, B., and Gardner, P. (2021) "Writing, Grammar and the Body: A Cognitive Stylistics Framework for Teaching Upper Primary Narrative Writing." *Literacy* 55(2): 125–135.
- Heister, H. (2014) "Mirror Neurons and Literature: Empathy and the Sympathetic Imagination in the Fiction of J.M. Coetzee." *MediaTropes eJournal* Vil 4(2): 98–113.
- Herman, D. (2002) *Story Logic: Problems and Possibilities of Narrative*. Lincoln, NE: University of Nebraska Press.
- Horowitz, E., Darby, M., and Moffett, K. (2012) *The Silent History*. <http://www.thesilenthistory.com/>
- Horowitz, E., and Quinn, R. (2015) *The Pickle Index*. <http://www.thepickleindex.com/>
- Horton, D., and Wohl, R. R. (1956) "Mass Communication and Para-Social Interaction: Observations on Intimacy at a Distance." *Psychiatry* 19: 215–29.
- Iacoboni, M. (2009) *Mirroring People: The Science of Empathy and How We Connect with Others*. New York: Farrar, Straus and Giroux.
- Ilgner, J., Kuhlmann, R., Eirund, H., and Hering-Bertram, M. (2013) "Interacting in 3D Virtual Worlds with Brain Computer Interfaces", *Proceedings of the 21st International Conference on Computer Graphics, Visualization and Computer Vision*, Plzen, Czech Republic: Vaclav Skala - Union Agency, 78–87.
- Infocom. (1980) *Zork 1*. Cambridge, MA: Personal Software and Infocom. Accessed via the Interactive Fiction Database. <https://ifdb.tads.org/viewgame?id=0dbnusxunq7fw5ro>
- Inkle. (2012) *Future Voices*. Cambridge: Inkle Studios.
- Isbister, K. (2016) *How Games Move Us: Emotion by Design*. Cambridge, MA: MIT Press.
- Jackson, S. (1995) *Patchwork Girl; Or, a Modern Monster by Mary/Shelley, & herself*. CD-ROM, Massachusetts, USA: Eastgate Systems.
- Jackson, S. (2014) *Sorcery!* Cambridge: Inkle Studios.
- James, E. (2022) "A Theory of Narrative Compassion." *Paper presented at International Conference On Narrative*, June 28–30, 2022. <https://thenarrativesociety.confex.com/thenarrativesociety/2022/meetingapp.cgi/Paper/1616>
- Järvelä, S. (2012) "The Golden Rule of Larp." In *States of Play: Nordic Larp Around the World*, edited by J. Pettersson. Helsinki, Finland: Pohjoismaisen roolipelaamisen seur, 19–24.
- Jarvella, R. J., and Klein, W. (Eds.) (1982) *Speech, Place, and Action: Studies in Deixis and Related Topics*. New York: John Wiley & Sons.

- Jerrett, A., Howell, P., and Dansey, N. (2021) "Developing an Empathy Spectrum for Games." *Games and Culture* 16(6): 635–659.
- Joyce, M. (1987) *afternoon: a story*. Watertown, MA: Eastgate Systems.
- Joyce, M. (1995) *Of Two Minds: Hypertext Pedagogy and Poetics*. Ann Arbor, MI: University of Michigan Press.
- Kacandes, I. (1993) "Are You in the Text?: The 'Literary Performative' in Postmodernist Fiction." *Text and Performance Quarterly* 13(2): 139–53.
- Kacandes, I. (2001) *Talk Fiction*. Lincoln, NE: University of Nebraska Press.
- Kazlauskaitė, R. (2022) "Knowing is Seeing: Distance and Proximity in Affective Virtual Reality History." *Rethinking History* 26(1), 51–70.
- Keen, S. (2007) *Empathy and the Novel*. New York: OUP.
- Keen, S. (2013) "Narrative Empathy." In: *The Living Handbook of Narratology*, edited by P. Hühn et al. Hamburg: University of Hamburg. [http://lhn.sub.uni-hamburg.de/index.php/Narrative\\_Empathy.html](http://lhn.sub.uni-hamburg.de/index.php/Narrative_Empathy.html)
- Kennedy, H. W., and Dovey, J. (2006) *Games Culture: Computer Games as New Media*. McGraw Hill: Open University Press.
- Kneepkens, E. W. E. M., and Zwaan, R. A. (1994) "Emotions and Text Comprehension." *Poetics* 23: 125–138.
- Koopman, E. (2015) "Empathic Reactions after Reading: The Role of Genre, Personal Factors and Affective Responses." *Poetics* 50: 62–79. <https://doi.org/10.1016/j.poetic.2015.02.008>
- Kuijpers, M., Hakemulder, F., Tan, E. S., and Doicaru M. M. (2014) "Exploring Absorbing Reading Experiences." *Scientific Study of Literature* 4(1): 89–122.
- Kuiken, D., Campbell, P., and Sopčák, P. (2012) "The Experiencing Questionnaire: Locating Exceptional Reading Moments." *Scientific Study of Literature* 2(2): 243–272.
- Kuzmicšová, A. (2016) "Does it Matter Where You Read? Situating Narrative in Physical Environment." *Communication Theory* 26: 290–308.
- Kuzmičová, A., Schilhab, T., and Burke, M. (2020) "m-Reading: Fiction Reading from Mobile Phones." *Convergence* 26(2): 333–49.
- Landow, G. P. (1994) "What's a Critic to Do? Critical Theory in the Age of Hypertext." In *HyperText/Theory*, edited by G. P. Landow. Baltimore, MD: Johns Hopkins University Press, 1–48.
- Landow, G. P. (2006) *Hypertext 3.0: Critical Theory and New Media in an Era of Globalization*. Baltimore, MD: Johns Hopkins University Press.
- Larsen, D., and geniwate's (2003) *The Princess Murderer*. <http://www.deenalarsen.net/princess/index.html>
- Levett-Jones, T., and Cant, R. (2019) "The Empathy Continuum: An Evidence-based Teaching Model Derived from an Integrative Review of Contemporary Nursing Literature." *Journal of Clinical Nursing* 29(7–8): 1026–1040.
- Loi, C., Kuijpers, M., Ensslin, A., and Lauer, G. (2023) "Paths to Transformation Across Contemporary Reading Practices: The Role of Motivations and Genre Preferences." *Psychology of Aesthetics, Creativity and the Arts* 17.
- Lombard, M., and Ditton, T. (1997) "At the Heart of it All. The Concept of Presence." *Journal of Computer-Mediated Communication* 3(2). <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.1997.tb00072.x/full>

- Lorentzen, C. (2018) "Sheila Heti, Ben Lerner, Tao Lin: How 'Auto' Is 'Autofiction'?" *Vulture*, May 11. <https://www.vulture.com/2018/05/how-auto-is-autofiction.html>
- Mac, Kathy (1994) "Unnatural Habitats." *Eastgate Quarterly Review of Hypertext* 1(3). Watertown, MA: Eastgate Systems.
- MacCallum-Stewart, E., and Parsler, J. (2007) "Illusory Agency in *VAMPIRE: THE MASQUERADE – BLOODLINES*." *Dichtung Digital: Journal für Kunst und Kultur digitaler Medien* 37(9): 1–17.
- Macrae, A. (2016) "You and I, Past and Present: Cognitive Processing of Perspective." *Diegesis* 5(1): 64–80.
- Macrae, A. (2019) *Discourse Deixis in Metafiction: The Language of Metanarration, Metalepsis and Disnarration*. London: Routledge.
- Mahlberg, M., Conklin, K., and Bisson, M. J. (2014) "Reading Dickens's Characters: Employing Psycholinguistic Methods to Investigate the Cognitive Reality of Patterns in Texts." *Language and Literature* 23(4): 369–88.
- Malloy, J. (1986) *Uncle Roger*. <https://collection.eliterature.org/3/works/uncle-roger/uncleog.html>
- Mangen, A. (2008) "Hypertext Fiction Reading: Haptics and Immersion." *Journal of Research in Reading*, 31(4): 404–419.
- Manovich, L. (2001) *The Language of New Media*. MIT Press.
- Margolin, U. (1990) "Narrative 'You' Revisited." *Language and Style* 23(4): 425–46.
- McDaid, J. (1993) *Uncle Buddy's Phantom Funhouse*. CD-ROM, Massachusetts, USA: Eastgate Systems.
- McDonald, T. (2022) "Feeling Sideways in Feminist Narratives", Paper given at ISSN Narrative 2022, June 29.
- McIntyre, D. (2006) *Point of View in Plays: A Cognitive Stylistic Approach to Viewpoint in Drama and Other Text-Types*. Amsterdam: Benjamins.
- McSweeney, T., and Joy, S. (2019) "Change Your Past, Your Present, Your Future? Interactive Narratives and Trauma in *Bandersnatch* (2018)." In *Through the Black Mirror: Deconstructing the Side Effects of the Digital Age*, edited by T. McSweeney and S. Joy. London: Palgrave Macmillan, 271–84.
- Messenger Davies, M., and Mosdell, N. (2006) *Practical Research Methods for Media and Cultural Studies: Making People Count*. Edinburgh: Edinburgh University Press.
- Miall, D. S. (2009) "Neuroaesthetics of Literary Reading." In *Neuroaesthetics*, edited by M. Skov and O. Vartanian. Amityville, NY: Baywood Publishing, 233–47.
- Miall, D. S., and Dobson, T. (2001) "Reading Hypertext and the Experience of Literature." *Journal of Digital Information* 35. <https://jodi-ojs-tdl.tdl.org/jodi/article/view/jodi-36>
- Miall, D. S., and Kuiken, D. (2002) "A Feeling for Fiction: Becoming What We Behold." *Poetics* 30(4): 221–241.
- Mildorf, J. (2016) "Reconsidering Second-Person Narration and Involvement." *Language and Literature* 25(2): 145–58.
- Milk, C. (2015) "How Virtual Reality Can Create the Ultimate Empathy Machine." *TED2015*. [https://www.ted.com/talks/chris\\_milk\\_how\\_virtual\\_reality\\_can\\_create\\_the\\_ultimate\\_empathy\\_machine](https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine)

- Mligo, E. S. (2016) *Introduction to Research Methods and Report Writing: A Practical Guide for Students and Researchers in Social Sciences and the Humanities*. Eugene, OR: Wipf and Stock Publishers.
- Montfort, N. (2005) *Twisty Little Passages*. Cambridge, MA: MIT Press.
- Mortimer, A. K. (2009) "Autofiction as Allofiction: Doubrovsky's L'Après-vivre." *L'Esprit Créateur* 49(3): 22–35.
- Moulthrop, S. (1991a) *Victory Garden*. Watertown, MA: Eastgate Systems.
- Moulthrop, S. (1991b) "Reading from the Map: Metonymy and Metaphor in the Fiction of Forking Paths." In *Hypermedia and Literary Studies*, edited by P. Delany and G. P. Landow, Cambridge, MA: MIT Press, 119–32.
- Moulthrop, S. (1995a) *Hegirascope*. <http://www.cddc.vt.edu/journals/newriver/moulthrop/HGS2/HGS121.html>
- Moulthrop, S. (1995b) *Hegirascope*. <http://www.cddc.vt.edu/journals/newriver/moulthrop/HGS2/HGS121.html>
- Munafo, J., Diedrick, M., and Stoffregen, T. A. (2016) "The Virtual Reality Head-mounted Display Oculus Rift Induces Motion Sickness and Is Sexist in Its Effects." *Experimental Brain Research* 235(3): 889–901. <https://doi.org/10.1007/s00221-016-4846-7>
- Murphy, D. (2022) "Virtual Reality and the Rhetoric of Empathy." In *A Companion to Motion Pictures and Public Value*, edited by M. Hjort and T. Nannicelli. Hoboken, NJ: Wiley & Sons, 488–508.
- Murray, J. H. (1997) *Hamlet on the Holodeck: The Future of Narrative in Cyberspace*. London: The Free Press.
- Nacke, L. E., Grimshaw, M. N., and Lindley, C. A. (2010) "'More than a feeling'. Measurement of Sonic User Experience and Psychophysiology in a First-Person Shooter Game." *Interacting with Computers* 22: 336–43.
- Nathanson, A. I. (2003) "Rethinking Empathy." In *Communication and Emotion: Essays in Honor of Dolf Zillmann*, edited by J. Bryant, D. Roskos-Ewoldsen, and J. Cantor. Hillsdale, NJ: Lawrence Erlbaum, 107–130.
- Nelson, J. (2008) *game, game, game and again game*. [https://collection.eliterature.org/2/works/nelson\\_game.html](https://collection.eliterature.org/2/works/nelson_game.html)
- Nørgaard, N. (2019) *Multimodal Stylistics of the Novel: More Than Words*. London: Routledge.
- Nuttall, L. (2017) "Online Readers Between the Camps: A Text World Theory Analysis of Ethical Positioning in *We Need to Talk About Kevin*." *Language and Literature* 26(2): 153–171.
- Oculus. (2017) *Dear Angelica*. <https://www.oculus.com/experiences/rift/1174445049267874/>
- Okita, R. (2020) *The Book of Distance*, National Film Board of Canada, [https://store.steampowered.com/app/1245640/The\\_Book\\_of\\_Distance/](https://store.steampowered.com/app/1245640/The_Book_of_Distance/)
- Ondrak, J. (2018) "Spectres des Monstres: Post-Postmodernisms, Hauntology and Creepypasta Narratives as Digital Fiction." *Horror Studies* 9(2): 161–78.
- Oppenheim, D. and Okita, R.L. (2020) "The Book of Distance: Personal Storytelling in VR." In *ACM SIGGRAPH 2020 Immersive Pavilion (SIGGRAPH '20)*. Association for Computing Machinery, New York, NY, USA, Article 5: 1–2.



- Parente, F., Conklin, K., Guy, J., Carrol, G., and Scott, R. (2019) "Reader Expertise and the Literary Significance of Small-Scale Textual Features in Prose Fiction." *Scientific Study of Literature* 9(1): 3–33.
- Parker, J. (2001) "A Poetics of the Link." *Electronic Book Review*, <https://electronicbookreview.com/essay/a-poetics-of-the-link>
- Patton, M. Q. (2002) *Qualitative Research & Evaluation Methods*. Thousand Oaks, CA: Sage.
- Peplow, D. (2016) *Talk About Books: A Study of Reading Groups*. London: Bloomsbury.
- Peplow, D., and Carter, R. (2014) "Stylistics and Real Readers." In *The Routledge Handbook of Stylistics*, edited by M. Burke. Abingdon: Routledge, 440–454.
- Peplow, D., Swann, J., Trimarco, P., and Whiteley, S. (2015) *The Discourse of Reading Groups: Integrating Cognitive and Sociocultural Perspectives*. London: Routledge.
- Persson, P. (1998) "Supporting Navigation in Digital Environments: A Narrative Approach." In *Proceedings of the Workshop Towards a Framework for Design and Evaluation of Navigation in Electronic Spaces*, edited by N. Dahlbäck. Stockholm: SICS, 189–198.
- Pettersson Pecker, A. P. (2022) "The Problem with Mirrors: From Empathy to Entrainment." Paper presented at International Conference On Narrative, June 28–30, 2022. <https://thenarrativesociety.confex.com/thenarrativesociety/2022/meetingapp.cgi/Paper/1618>
- Phelan, J. (1994) "'Self-Help' for Narratee and Narrative Audience: How 'I'—and 'You'?—Read 'How'." *Style* 28(3): 350–365.
- Phelan, J. (2005) *Living to Tell About It: A Rhetoric and Ethics of Character Narration*. Cornell University Press.
- Phelan, J., and Rabinowitz, P. (2012) "Narrative as Rhetoric." In *Narrative Theory: Core Concepts and Critical Debates*, edited by Herman, D et al. Ohio: State University Press, 3–8.
- Pianzola, F., Bálint, K., and Weller, J. (2020) "Virtual Reality as a Tool for Promoting Reading via Enhanced Narrative Absorption and Empathy." *Scientific Study of Literature* 9(2): 163–194.
- Poels, K., de Kort, Y., and Ijsselstein, W. (2007) "'It is always a lot of fun!'. Exploring Dimensions of Digital Game Experience Using Focus Group Methodology." *Proceedings of the 2007 conference on Future Play*, 83–89.
- Polvinen, M., and Sklar, H. (2019) "Mimetic and Synthetic Views of Characters: How Readers Process 'People' in Fiction." *Cogent Arts & Humanities* 6(1): 1–15.
- Pope, J. (2006) "A Future for Hypertext Fiction." *Convergence* 12(4): 447–65.
- Pope, J. (2010) "Where Do We Go from Here? Readers' Responses to Interactive Fiction: Narrative Structures, Reading Pleasure And The Impact Of Interface Design." *Convergence* 16(1): 75–94.
- Posner, M. I. (1980) "Orienting of Attention." *Quarterly Journal of Experimental Psychology* 32: 3–25.
- Preston, S., and de Waal, F. (2002) "Empathy: Its Ultimate and Proximate Bases." *Behavioral and Brain Sciences* 25: 1–72.

- Protopsaltis, A., and Bouki, V. (2005) "Towards a hypertext reading/comprehension model". *ACM International Conference on Design of Communication*, 159–166.
- Pullinger, K. (2018) *Breathe*. <https://research.ambientlit.com/breathe>
- Pullinger, K., Joseph, C., and Participants. (2010) *Flight Paths: A Networked Novel*. [www.flightpaths.net](http://www.flightpaths.net)
- Punday, D. (2014) "Seeing into the Worlds of Digital Fiction." In *Analyzing Digital Fiction*, edited by A. Bell et al. Routledge, 57–73.
- Punday, D. (2019) *Playing at Narratology: Digital Media as Narrative Theory*. Columbus, OH: Ohio State University Press.
- Rabinowitz, P. J. (1977) "Truth in Fiction: A Reexamination of Audiences." *Critical Inquiry* 4(1): 121–41.
- Raley, R. (2010) "Walk This Way: Mobile narrative as composed experience." In *Beyond the Screen: Transformations of Literary Structures, Interfaces and Genres* edited by J. Schäfer and P. Gendolla. Bielefeld: Transcript Verlag, 299–316.
- Rameson, L. T., Morelli, S. A., and Lieberman, M. D. (2012) "The Neural Correlates of Empathy: Experience, Automaticity, and Prosocial Behavior." *Journal of Cognitive Neuroscience* 24(1): 235–245.
- Reed, A., Garbe, J., and Apostol, N. J. (2016) *The Ice-Bound Concordance*. <https://www.ice-bound.com/>
- Rettberg, S. (2002) "The Pleasure (and Pain) of Links Poetics." *Electronic Book Review*. <http://www.electronicbookreview.com/thread/electropoetics/pragmatic>
- Rettberg, S. (2019) *Electronic Literature*. Cambridge: Polity.
- Richardson, B. (2006) *Unnatural Voices: Extreme Narration in Modern and Contemporary Fiction*. Columbus, OH: Ohio State University Press.
- Richardson, B. (Ed.) (2011) "The Implied Author: Back from the Grave or Simply Dead Again?" *Special Issue of Style* 45(1).
- Rosenberg, J. (1994) "Intergrams." *Eastgate Quarterly Review of Hypertext* 1(1). Watertown, MA: Eastgate Systems.
- Ruberg, B. (2020) "Empathy and Its Alternatives: Deconstructing the Rhetoric of 'Empathy' in Video Games, Communication." *Culture and Critique* 13(1): 54–71.
- Rustad, H. K. (2012) *Digital Litteratur: En innføring*. Oslo: Cappelen Damm Akademisk.
- Ryan, M.-L. (2001) *Narrative as Virtual Reality: Immersion and Interactivity in Literature and Electronic Media*. Baltimore, MD: Johns Hopkins University Press.
- Ryan, M.-L. (2006) *Avatars of Story*. London: University of Minnesota Press.
- Ryan, M.-L. (2015) *Narrative as Virtual Reality 2: Revisiting Immersion and Interactivity in Literature and Electronic Media*. Baltimore, MD: Johns Hopkins University Press.
- Salter, A. (2015) "Convergent Devices, Dissonant Genres: Tracking the "Future" of Electronic Literature on the iPad." *Electronic Book Review* <https://electronicbookreview.com/essay/convergent-devices-dissonant-genres-tracking-the-future-of-electronic-literature-on-the-ipad/>
- Sanford, A., and Emmott, C. (2012) *Mind, Brain and Narrative*. Cambridge: Cambridge University Press.

- Schaefer, H., and Starre, A. (Eds.) (2019) *The Printed Book in Contemporary American Culture: Medium, Object, Metaphor*. London: Palgrave-Macmillan
- Schank, R. C., and Abelson, R. P. (1977) *Scripts, Plans, Goals and Understanding: An Inquiry into Human Knowledge Structures*. Hillsdale, NJ: Lawrence Erlbaum.
- Schreiber, U. (1998) *Das Epos der Maschine*. <http://kunst.im.internet.de/epos-der-maschine/>
- Schutte, N. S., and Stilinović, E. J. (2017) "Facilitating Empathy through Virtual Reality." *Motiv Emot* 41: 708–712.
- Serpell, N. "The Banality of Empathy." *The New York Review of Books*, March 2, 2019. <https://www.nybooks.com/online/2019/03/02/the-banality-of-empathy/>
- Shamay-Tsoory, S.G., Aharon-Peretz, J., and Perry, D. (2009) "Two Systems for Empathy: a Double Dissociation between Emotional and Cognitive Empathy in Inferior Frontal Gyrus versus Ventromedial Prefrontal Lesions." *Brain* 132(3):617–627.
- Shedlosky-Shoemaker, R., Costabile, K. A., and Arkin, R. M. (2014) "Self-Expansion through Fictional Characters, Self and Identity." 13(5): 556–78.
- Shen, D. (2017) "Implied Author, Authorial Audience, and Context: Form and History in Neo-Aristotelian Rhetorical Theory." *Narrative* 21(2): 140–58.
- Shen, L. (2010) "On a Scale of State Empathy during Message Processing." *Western Journal of Communication* 74(5): 504–524.
- Shin, D. (2018) "Empathy and Embodied Experience in Virtual Environment: To What Extent Can Virtual Reality Stimulate Empathy and Embodied Presence?." *Computers in Human Behavior* 78: 64–73.
- Shuman, A. (2005) *Other People's Stories: Entitlement Claims and the Critique of Empathy*. Chicago, IL: University of Illinois Press.
- Sicart, M. (2009) *The Ethics of Computer Games*. Cambridge, MA: MIT Press.
- Simon, L.S., Rosen, C.C., Gajendran, R.S., Ozgen, S., and Corwin, E.S. (2022) "Pain or Gain? Understanding How Trait Empathy Impacts Leader Effectiveness Following the Provision of Negative Feedback." *Journal of Applied Psychology* 107(2): 279–297.
- Skains, L. (2017) *The Futographer*. [http://lyleskains.com/Twine/The\\_Futographer\\_short.html](http://lyleskains.com/Twine/The_Futographer_short.html)
- Slater, M., and Sanchez-Vives, M. V. (2016) "Enhancing Our Lives with Immersive Virtual Reality." *Frontiers in Robotics and AI* 3: 1–47.
- Slater, M., and Wilbur, S. (1997) "A Framework for Immersive Virtual Environments (FIVE): Speculations on the Role of Presence in Virtual Environments." *Presence: Teleoperators and Virtual Environments* 6: 603–616.
- Slatin, J. M. (1990) "Reading Hypertext: Order and Coherence in a New Medium." *College English* 52: 870–83.
- Sorlin, S. (2022) *The Stylistics of "You": Second-Person Pronoun and its Pragmatic Effects*. Routledge.
- Stam, R., Burgoyne, R., and Flitterman-Lewis, S. (1992) *New Vocabularies in Film Semiotics*. London: Routledge.
- Stenros, J., and Montola, M. (2011) "Parasocial Interaction in Pervasive Role-Play: The Case of Sanningen om Marika." In *Think Larp* edited by T. D. Henriksen, C. Bierlich, K. F. Hansen, and V. Kølle. Knudpunkt, 124–51.

- Stockwell, P. (2019) "Immersion and Emergence in Children's Literature." In *Experiencing Fictional Worlds*, edited by B. Neurohr and L. Stewart-Shaw. Linguistic Approaches to Literature 32, Amsterdam: John Benjamin, 15–32.
- Stockwell, P. (2020) *Cognitive Poetics: An Introduction*, 2nd edition. Oxon, UK: Routledge.
- Story City. (2016) *Story City*. <http://www.storycity.com.au/>
- Strickland, S. (1997) "Poetry in the Digital Environment." *Electronic Book Review*. [www.electronicbookreview.com/thread/electropoetics/map-like](http://www.electronicbookreview.com/thread/electropoetics/map-like)
- Swann, J., and Allington, D. (2009) "Reading Groups and the Language of Literary Texts: A Case Study in Social Reading." *Language and Literature* 18(3): 247–64.
- Tabbi, J. (Ed.) (2018) *The Bloomsbury Handbook of Electronic Literature*. New York: Bloomsbury.
- Takacs, Z. K., Swart, E. K., and Bus, A. G. (2015) "Benefits and Pitfalls of Multimedia and Interactive Features in Technology-Enhanced Storybooks: A Meta-analysis." *Review of Educational Research* 85(4): 698–739.
- Tatro-Duarte, R.R., and MacQuarrie, C.W. (2021) "Work-in-Progress—Language, Culture, and Heritage: The VR Experience the Book of Distance and Teaching the Family Folklore Project." *7th International Conference of the Immersive Learning Research Network (iLRN)*, Eureka, CA, USA: 1–3.
- Tender Claws. (2015) *Pry*. <http://prynovella.com>
- Thomas, B. (2007) "Stuck in a Loop? Dialogue in Hypertext Fiction." *Narrative* 15(3): 358–72.
- Thon, J.-N. (2008) "Immersion Revisited: On the Value of a Contested Concept." In *Extending Experiences: Structure, Analysis and Design of Computer Game Player Experience*, edited by O. Leino, H. Wirman and A. Fernandez. Rovaniemi: Lapland University Press, 29–43.
- Thon, J.-N. (2009) "Perspectives in Contemporary Computer Games." In *Point of View, Perspective, and Focalization: Modelling Mediation in Narrative*, edited by P. Hühn, W. Schmid, and J. Schönert. Berlin: de Gruyter, 279–300.
- Thon, J.-N. (2013) "Mediality." In *The Johns Hopkins Guide to Digital Media*, edited by M. L. Ryan et al. The Johns Hopkins University Press, 334–337.
- Tosca, S. P. (2000) "A Pragmatics of Links." *Journal of Digital Information* 1(6). <https://journals.tdl.org/jodi/index.php/jodi/article/view/23/24>
- Turner, M. (1996) *The Literary Mind: The Origins of Thought and Language*. Oxford: OUP.
- van der Bom, I., Skains, L., Bell, A., and Ensslin, A. (2021) "Reading Hyperlinks in Hypertext Fiction." In *Style and Reader Response*, edited by A. Bell et al. Benjamins, 123–141.
- van Peer, W., Hakemulder, F., and Zyngier, S. (2012) *Scientific Methods for the Humanities*. Amsterdam: John Benjamins.
- Vincent J. (2005) "Emotional Attachment to Mobile Phones: An Extraordinary Relationship." In *Mobile World* edited by A. Lasen and D. Diaper. London: Springer, 93–104.
- Walker, J. (2000) "Do You Think You're Part of This? Digital Texts and the Second Person Address." In *Cybertext Yearbook 2000*, edited by M. Eskelinen and R. Koskimaa. University of Jyväskylä, Finland: Research Centre for Contemporary Culture. [http://jilltxt.net/text/do\\_you\\_think.pdf](http://jilltxt.net/text/do_you_think.pdf)

## 202 References

- Warhol, R. R. (1986). "Toward a Theory of the Engaging Narrator: Earnest Interventions in Gaskell, Stowe, and Eliot." *PMLA* 101(5): 811–18.
- Warhol, R. R. (1989) *Gendered Interventions: Narrative Discourse in The Victorian Novel*. Columbus, OH: Ohio State University Press.
- Whiteley, S. (2011) "Text World Theory, Real Readers and Emotional Responses to *The Remains of the Day*." *Language and Literature* 20(1): 23–42.
- Whiteley, S. (2016) "Building Resonant Worlds: Experiencing the Text-Worlds of *The Unconsoled*." In *World Building: Discourse in the Mind*, edited by J. Gavins and E. Lahey. London: Bloomsbury, 165–82.
- Whiteley, S., and Canning, P. (2017) "Reader Response Research in Stylistics." *Language and Literature* 26(2): 71–87.
- Wiesner, D. (2015) *Spot*. Chicago, IL: Houghton Mifflin Harcourt.
- Wittig, R., and Marino, M. (2015) *I Work for the Web*. [http://robwit.net/iwfw/?page\\_id=50](http://robwit.net/iwfw/?page_id=50)
- Woodruff, C. C. (2018) "Reflections of Others and of Self: The Mirror Neuron System's Relationship to Empathy." In *The Neuroscience of Empathy, Compassion, and Self-Compassion*, edited by L. Stevens and C. C. Woodruff. London: Academic Press, 157–187.
- Yantis, S. (1998) "Control of Visual Attention." In *Attention*, edited by H. Pashler. Hove: Psychology Press, 223–56.
- Zwaan, R. (2004) "The Immersed Experiencer: Toward an Embodied Theory of Language Comprehension." *The Psychology of Learning and Motivation* 44: 35–62.

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