

Recalling Atwood:
Text World Theory and Memories of Narrative Fiction

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Thesis submitted to the University of Sheffield in partial requirement
for the degree of Doctor of Philosophy

December 2023

Abstract

Text World Theory (Gavins 2007; Werth 1999) is a cognitive-linguistic model of discourse processing which describes mental representations that discourse participants create during spoken or written communication. It stands as a counterpoint to traditional theories of linguistic comprehension by providing an account of how listeners and readers draw on background knowledge and an awareness of discourse context, as well as on linguistic cues, when interpreting texts.

To date, Text World Theory has largely focused on accounting for mental representations produced in the moment of communication. However, comprehension of lengthy fictional narratives involves drawing on a growing body of background knowledge about a fictional world. Limited attention has so far been paid to how text-worlds change as they are stored in, and subsequently retrieved from, long-term memory.

This thesis attempts to address this absence. It presents two original reader-response studies of reader summaries of Margaret Atwood's fiction. Atwood's innovative prose juxtaposes discourses of different types and frequently features unreliable narrators. This presents interpretive challenges which foreground strategies required to create coherent long-term mental representations of narratives. Using Text World Theory as a framework for stylistic analysis, I compare the conceptual structures of readers' summaries of narratives with those of the texts that prompted them. Noting similarities between the two studies, gathered under different conditions, I suggest readers adopt predictable strategies when consolidating mental representations they create when reading and later recalling them.

Building on this analysis, I argue Text World Theory can be expanded to account for readers' evolving representations of fictional worlds. I suggest it may benefit from drawing on the 'storyworlds' model (Herman 2002, 2009; Ryan 2019, 2022; Ryan and Thon 2014), and that together the two frameworks may provide a more complete account of readers' long-term mental representations of fictional narratives than Text World Theory alone.

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Acknowledgements

This thesis has a single name on the cover, but would not have come into being without the help and guidance of some incredible people who have offered both academic and emotional support.

First and foremost I would like to thank my primary supervisor Joanna Gavins, without whom this project would never have taken the shape that it did. Jo has been a constant source of inspiration and advice, and I could not have hoped for a better guide to a new academic world. I would also like to thank my second supervisor Sara Whiteley for her support over the past six years, and for her advice about designing reader-response studies which helped steer my research.

I would like to say a huge thank you to Andrea Macrae, who offered me my first experience of teaching stylistics; an opportunity which enriched my own learning no end. Andrea's patience and dedication to her students were invaluable as I plucked up the courage to begin my first classes.

One of the most rewarding parts of my PhD has been the chance to feel part of a vibrant and supportive research community. I am grateful to PALA, and to Marcello Giovanelli and Chloe Harrison of the Aston Stylistics Research Group for offering me my first chances to present my work in public. I am also grateful to everyone who has asked an insightful question about my research, or offered a patient response as I have asked an elementary question about theirs. Thank you all for making this project feel like a team effort.

Studying part time has meant balancing PhD research with freelance work, and I am grateful to everyone - from both halves of my professional life - who has been accommodating as I have juggled different roles. Particular thanks are due to Sebastian Groes, whose own work and dedication to public engagement remain an inspiration.

Finally - and most importantly of all - thank you to my family: to my parents for their unwavering love and support and for helping me take my first steps on my journey, to Louise for love, adventures and for building a life with me, and to Aimee for letting me introduce her to many worlds, including the magical one we call real.

Abbreviations

The following abbreviations are used consistently throughout this thesis to refer to works by Margaret Atwood.

Novels and works of prose fiction

CE	<i>Cat's Eye</i> (1989)
OC	<i>Oryx and Crake</i> (2003)
S	<i>Surfacing</i> (1973)
SM	<i>Stone Mattress: Nine Wicked Tales</i> (2014)
TBA	<i>The Blind Assassin</i> (2000)
THT	<i>The Handmaid's Tale</i> (1985)

Works of non-fiction

ND	<i>Negotiating with the Dead</i> (2002)
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1. Introduction

This thesis seeks to explore the processes by which readers of literary narratives build and maintain mental representations of fictional worlds in long-term memory. One factor which often distinguishes literary narratives from conversational narratives is their length. Novels are typically read in more than one sitting over a period of days or weeks, and even relatively brief short stories can be many times longer than narratives told in conversational settings. Comprehending the latter stages of a novel or short story involves readers drawing on a substantial amount of knowledge about previously described states of affairs in a fictional world. A complete cognitive account of literary narrative comprehension must therefore seek to explain not only the mental representations that readers create in the moment of reading, but also how such representations are remembered and later recalled.

Previous studies of narrative recall (for example Bartlett 1932; Brainerd and Reyna 2005; Elfenbein 2018; Reyna and Brainerd 1995; Reyna and Kiernan 1994) have suggested that readers' memories of narratives - sometimes referred to as 'gist representations' - often differ considerably from the narratives which prompted them. However, such studies have not offered detailed accounts of the cognitive processes by which these long-term mental representations are created. To explore these processes in more detail, I draw on Text World Theory as a primary theoretical framework. Text World Theory (Gavins 2007; Werth 1999) is a cognitive-linguistic model which aims to account for the mental representations built during discourse comprehension. It has two strengths which make it particularly suitable for this study. Firstly, it is a theory which attempts to account for all instances of spoken or written discourse comprehension. It is therefore a framework which can account for the ways in which the comprehension of literary narratives builds on cognitive processes which are used during face-to-face communication. Secondly, it makes links between the specific linguistic features of a text and the precise mental representations it predicts readers will form as a result. It therefore offers a rigorous starting point from which to explore the mental representations that are created during the comprehension of literary narratives. To date however, the primary focus of Text World

Theory has been on accounting for the mental representations that readers create in the moment of reading or listening (see, for example, Gavins 2007, 2013, 2020; Giovanelli 2013; Lahey 2019; Norledge 2019, 2021, 2022; Whiteley 2011, 2016). Less attention has so far been paid to the question of how such mental representations evolve as discourse progresses. Therefore, at the same time as exploring readers' long-term memories of narratives, this thesis also aims to explore how text-world mental representations created in the moment-by-moment comprehension of literary texts evolve over time, as narratives are stored in and later recalled from memory.

In order to examine these questions, this thesis draws on examples of prose fiction by Margaret Atwood to provide detailed case studies. Two features of Atwood's writing make her a particularly suitable subject for this project. Firstly, her fictional narratives frequently make use of complex structural devices, for example by blending present and past tense narration, by switching between multiple narrators, or by presenting events in non-chronological order. They therefore present particular interpretive challenges to readers. As such, they foreground many of the processes that readers undergo when attempting to build long-term mental representations of narratives of all kinds. Indeed, as I explore in more detail in the coming chapters, many critics (such as Dancygier 2007; Grace 1994; McWilliams 2009) have read Atwood's oeuvre as an exploration of how people create coherent narratives from fragmentary experiences.

Secondly, Atwood's fictions have the advantage that they have received a large amount of critical attention, both from professional literary critics and from readers who have read and discussed her work in non-academic contexts. This means that it is possible to examine reactions to her work using a variety of different reader-response approaches (see Bell et al 2021; Hakemulder et al 2016; Peplow et al 2017; Peplow and Carter 2017; Steen 1991; Swann and Allington 2009; Van Peer et al 2007; Whiteley and Canning 2017). As well as presenting my own experimental data, I have been able to draw upon a substantial body of existing reviews of Atwood's fiction. I will argue later in this thesis that the results I have gathered from different sources reveal evidence of many of the same cognitive processes, and that this lends additional credibility to my findings.

Specifically then, this thesis sets out to answer two main research questions:

- How do the text-world mental representations that readers create during the moment by-moment comprehension of Atwood's prose fiction evolve as they are remembered and recalled?
- How might text-world theory be expanded to account for the mental representations of fictional narratives that readers store in the long-term memory?

As a theory grounded in cognitive linguistics, Text World Theory is one of a number of methodological approaches which underpin contemporary cognitive stylistics (see also Bell et al 2021; Gavins 2007, 2013, 2020; Gavins and Lahey 2016; Gavins and Steen 2003; Gibbons and Whiteley 2018; Giovanelli and Harrison 2013; Lambrou 2022; Neurohr and Stewart-Shaw 2019; Norledge 2022; Semino 1997; Semino and Culpeper 2022; Stockwell 2002, 2015; Stockwell and Whiteley 2014). However, it is not the only cognitive model of narrative comprehension. Another framework which has received attention in recent years is the 'storyworlds' model (Herman 2002, 2009; Ryan 2019, 2022; Ryan and Thon 2014). Like Text World Theory, the storyworlds model defines narratives as mental representations. However, it does not share Text World Theory's linguistic focus. This means that, while it does not enable the same degree of precise linguistic analysis, it does offer explanations of phenomena which are not currently accounted for in the Text World Theory framework. For example, it argues that people build storyworld mental representations of narratives that are presented through non-linguistic media, or narratives which have yet to be instantiated as texts (Herman 2009). It also explores how readers build representations of large fictional worlds described by more than one text, and hence offers an account of extended narrative processing. In this thesis, I explore the idea that Text World Theory may be able to incorporate elements of the storyworld framework to account for the mental representations of fictional worlds that readers create and maintain, even when the precise linguistic formulations of narrative texts are not recalled.

1.1 - The Structure of this Thesis

This thesis is comprised of ten chapters. In this first chapter, I have outlined my research aims and overarching research questions in broad terms.

In Chapter 2, I review several key theoretical concepts that will inform the arguments I present in this thesis. In Section 2.1, I discuss the topic of mental representation in more detail. I note that the nature of mental representations remains a matter of debate among cognitive psychologists, and therefore outline some preliminary assumptions about mental representation on which the arguments I present in subsequent chapters will be built. In Section 2.2, I introduce several frameworks that have emerged within the field of cognitive linguistics and which have underpinned the development of Text World Theory. These include conceptual categories (Section 2.2.1), schemata (Section 2.2.2), conceptual metaphors (Section 2.2.3), mental spaces (Section 2.2.4), conceptual integration (Section 2.2.5) and situation models (Section 2.2.6). In Section 2.3, I go on to discuss current theories of human memory. I note a widely acknowledged distinction between working and long-term memory (Section 2.3.1); a distinction which will be crucial to my discussion of how text-world mental representations evolve over time. I also review the concept of 'gist representations' of narratives (Section 2.3.2), and note the suggestion that readers' long-term memories of narrative texts involve memories of emotional responses as well as textual details.

In Chapter 3, I provide a comprehensive introduction to Text World Theory, and place it within the context of other theories that draw on the metaphor of 'worlds' to offer accounts of literary comprehension. Possible worlds theories (Section 3.1) provide a framework for discussing the fictional worlds projected by texts, but do not account for the cognitive processes that readers employ during textual comprehension. As I have already noted, the storyworlds framework (Section 3.3) offers a cognitive account of narrative comprehension, but does not describe connections between specific linguistic prompts and the resulting mental representation of storyworlds that readers create. Text World Theory (Section 3.2), by contrast, offers both a theory about the mental representations that

readers create while reading, and an analytical framework to map the 'conceptual structure' prompted by the language of literary and non-literary texts (Gavins 2007: 46). Comparing these dual features of the framework, I argue that Text World Theory can be used as a rich source of hypotheses against which the responses of readers in a variety of different reading contexts can be tested. I conclude the chapter by suggesting that readers' text-world mental representations are consolidated in predictable ways as they are stored in the long-term memory and later recalled. Here I offer a more precise set of hypotheses about particular consolidation processes that may occur, which I will test in the following chapters.

In Chapter 4, I discuss how contemporary stylistic practice is increasingly characterised by attempts to account for ways in which a wide variety of readers respond differently to texts in different contexts. I note how a tradition of empirical stylistics has drawn on techniques of experimental psychology to obtain empirical data about reading experiences gathered under controlled conditions, and contrast these with more recent reader-response methodologies which seek to explore reading in more naturalistic contexts. I then introduce four specific data-gathering methodologies relevant to this thesis: the discussion of reviews of literary texts published in academic contexts (Section 4.2.1), reading group studies (Section 4.2.2), reviews of contributions to community websites (Section 4.2.3), and questionnaire-based studies (Section 4.3.4). Noting strengths and weaknesses of each methodology, I suggest that studies that combine analyses of more than one type of data, gathered under different conditions, can provide a more comprehensive picture of how real readers respond to texts.

In Chapter 5, I offer an introduction to Margaret Atwood's prose fiction, and to existing responses to her work. As I do throughout this thesis, I juxtapose responses from professional literary critics with reactions from readers in non-academic contexts. Here I introduce the first reader-response study I draw upon in this thesis: a study of reviews of Atwood's fiction posted to the Goodreads website (Section 5.1). I go on to discuss several themes that are raised frequently by readers in discussions of Atwood's work, including critiques of nationalism and Canadian identity

(Section 5.2.1), literary archetypes and narrative rewritings (Section 5.2.2), feminism and female writing (Section 5.2.3), autobiography and life writing (5.2.4), and Atwood's use of language and formal experimentation (Section 5.2.5). In Section 5.3, I review two specific cognitive stylistic studies of Atwood's fiction. As well as demonstrating how such approaches can account for readings of Atwood's work, I also suggest that these studies provide preliminary evidence of the authors employing the sorts of consolidation process I predicted in Chapter 3.

In Chapter 6, I present the results of my first detailed case study: a summary of responses to Atwood's novel *Surfacing*. After noting a number of significant responses to the text, I offer my own text-world analysis of passages from the novel, and demonstrate how these account for some - but not all - of the responses I identify. I then conduct a systematic study of reviews of the novel taken from the Goodreads website, and identify multiple examples of readers consolidating Atwood's prose to present summaries with distinct text-world conceptual structures. I conclude the chapter by reviewing and refining the hypotheses offered in Chapter 3 in the light of these findings.

In Chapter 7, I present the results of my second case study, focussing on readings of Atwood's novel *The Blind Assassin*. As in Chapter 6, I identify several key responses to the work and discuss these in the light of my own text-world analyses of the text. I then reveal the findings of my second reader-response study; a survey of 191 respondents who summarised short passages from Atwood's text. As with my *Surfacing* study, I suggest that my findings reveal evidence of consistent strategies that readers adopt when consolidating Atwood's prose during reading and subsequent recall. In many cases, these consolidation processes result in participants producing summaries that have more simple conceptual structures than the texts which prompted them. However, I also note instances of readers supplementing information explicitly prompted by the source text with their own inferences about what is happening in the fictional world projected by Atwood's text. I conclude the chapter by revisiting and revising my developing hypotheses in the light of these findings.

In Chapter 8, I discuss the implications of these studies for Text World Theory, and argue that there is a need to expand Text World Theory to account for what happens to readers' text-world

mental representations as they are stored in the long-term memory and later recalled. In Section 8.1, I discuss consolidation processes that involve readers simplifying complex networks of text-world representations by combining information from multiple representations. In Section 8.2, I review recent work by Gibbons (2023), who proposes supplementing Text World Theory with a process she terms 'world-retrieval'. I argue that my studies provide evidence of the world-retrieval process that Gibbons describes, but suggest that other processes must also occur to account for all the data I present. In Section 8.3, I explore the idea that readers may store textual information in multiple different formats in the long-term memory. In Section 8.4, I then propose that it is possible to draw on the storyworlds framework to complement Gibbons' notion of world-retrieval, and argue that by expanding Text World Theory with elements of the storyworlds model it is possible to provide a more comprehensive account of narrative comprehension than Text World Theory offers on its own.

In Chapter 9, I complement the theoretical discussion I offer in Chapter 8 by offering my own reading of Atwood's 'Alphinland' short story sequence, drawing on the expanded Text World Theory I have proposed. The 'Alphinland' stories each stand alone, but are set in the same fictional universe. I therefore argue they each prompt the creation of distinct text-worlds but together invoke a single storyworld. I go on to argue that a combined text-world and storyworld analysis allows us to account for readings of the text that neither framework can explain alone.

In Chapter 10, I provide a concise summary of the arguments in this thesis, and make suggestions for further research to consolidate and extend the work I have begun.

2. Representing Knowledge in the Mind

In this chapter I describe some of the developments that have led to a cognitive revolution in linguistics in the past few decades, and which have driven the evolution of cognitive stylistics. This revolution has occurred in parallel with the growth of cognitive psychology as a discipline, and one axiom of cognitive linguistics is that the tools used for language comprehension are the same as those required for completing a wide range of other mental tasks (Croft and Cruise 2004: 2). A comprehensive overview of cognitive psychology and cognitive linguistics is not possible in a thesis of this length. My summary therefore foregrounds cognitive linguistic frameworks which have paved the way for Text World Theory, the primary theoretical framework I adopt in this thesis, which I describe in detail in Chapter 3. More comprehensive introductions to cognitive psychology and cognitive linguistics are given in Croft and Cruise (2004), Gardner (1987), Lakoff (1987), Levitin (2002), Neisser (1967) and Ungerer and Schmid (2013).

Text World Theory is grounded in a claim that when we process discourse, '[w]e construct mental representations, or text-worlds, which enable us to conceptualise and understand every piece of language that we encounter' (Gavins 2007: 2). I therefore begin this chapter with an introduction to theories of mental representation, which underpin many of the key debates in cognitive psychology. As I will demonstrate in Section 2.1, the term 'mental representation' can be a problematic one, and it will be important to define the sense in which I will be using it throughout this thesis. I follow this discussion with overviews of several key topics in cognitive linguistics: conceptual categories (Section 2.2.1), schemata (Section 2.2.2), conceptual metaphors (Section 2.2.3), mental spaces (Section 2.2.4), conceptual integration (Section 2.2.5) and situation models (Section 2.2.6), all of which have informed Text World Theory. I conclude the chapter with an overview of recent theories of memory (Section 2.3), which I will draw upon in the following chapters as I discuss how Text World Theory might be expanded to account for the ways in which readers' mental representations of a discourse evolve over time.

2.1 - Mental Representations

From the 1920s to the 1950s, psychology was dominated by 'behaviourism'; the belief that the only scientific methodology available to psychologists was the study of how a subject's environment affected measurable behavioural traits (Gardner 1987; Graham 2019; Mandler 2011; Neisser 1967). Researchers were encouraged 'to eschew such topics as mind, thinking, or imagination', and to avoid all discussion of 'hypothetical mental constructs like symbols, ideas, schemas, or other possible forms of mental representation' (Gardner 1987: 11). However, by the late 1940s, there was a growing acceptance that many complex behaviours, including the production of language, could not be accounted for in terms of responses to external stimuli alone (Gardner 1987: 13). A shift in focus followed, fuelled in no small part by attempts to explore the ways in which new digital computers could be programmed to mimic the information processing capabilities of human subjects. The result was the emergence of a new cognitive psychology; the study of 'all the processes by which the sensory input is transformed, reduced, elaborated, stored, recovered and used' (Neisser 1967: 4) in the human mind.

Neisser's (1967) manifesto for this new discipline emphasised that humans have no direct access to the external world, and that all their knowledge about the world is mediated both by the senses and by the ways in which information from the senses is subsequently processed. According to the 'representational theory of mind' (Pitt 2020; Shea 2018; Von Eckardt 2012), information from the senses is used to create representations of the external world in our minds:

A representation is a label or symbol that stands for something in its absence. Internal representations are the product of perceptual processes and the means by which we store information in memory. (Andrade and May 2004: 85)

A natural extension of this view is the widely repeated suggestion (see for example Johnson-Laird 1983: x, Shea 2018: 4) that thinking involves the manipulation of such internal representations.

However, while this explanation may have intuitive appeal, supplementing it with detail about what form such representations take and what exactly is manipulated during thinking has proved remarkably difficult. Smortchkova et al note that:

Philosophers of cognitive science disagree not only about what constitutes a mental representation, but also about the role of mental representations in explanations of cognitive functions. (Smortchkova et al 2021: 1)

To explore this idea further, it is necessary to consider more precisely how mental representations may relate to the entities they represent. In the following subsections, I offer a brief summary of some key debates that surround the question of mental representation (Section 2.1.1), and then outline the assumptions I will be making in this thesis (Section 2.1.2).

2.1.1 - Debates About Mental Representation

Smortchkova et al introduce the notion of a mental representation as follows:

When discussed in the context of cognitive science, [...] a mental representation is a physical object (usually instantiated in the brain by neural structures).’ (Smortchkova et al 2021: 2)

They subsequently clarify:

Just like non-mental symbols, mental representations have a dual aspect: there is the representational vehicle on the one hand, which is the physical realisation of representation, and the content on the other hand, which is what the representation is about. In a non-mental example, the word “cat” and a picture of a cat are both about cats,

but they represent cats with different vehicles. Vehicular properties include both material properties (the medium) and (roughly) syntactic formal properties. In our example, “cat” has a linguistic format, and is realised as ink on paper. The picture of a cat has an imagistic format and is realised on a photographic plate. Similarly, mental representations with the same content can have different vehicles. (Smortchkova et al 2021: 2-3)

This definition mirrors a more general distinction that has frequently been made between two different classes of representation (see for example Gavins 2001: 45-7; Von Eckhardt 2012: 3). Analog (or iconic) representations, such as a picture of a cat, preserve some significant element of resemblance between representation and content, are perceived holistically, and are stored as perceptual wholes. While visual representations offer a paradigmatic example, cognitive scientists use the phrase ‘mental imagery’ more generally to explore the possibility of analog mental representations in any perceptual modality, including auditory, olfactory, tactile and emotional mental experiences (Damasio 2000; Nanay 2018). In contrast to analog representations, analytic representations, such as linguistic signs (Saussure 1916), rely on arbitrary links between a representation and that which it represents.

There has been much debate about the form that mental representations take, and about whether mental images exist independently from analytical representations (see, for example, Dennett 1993; Johnson-Laird 1983; Kosslyn 1980; Kosslyn et al 2006). Prior to the 1970s, most psychologists assumed that information stored in the brain was exclusively propositional (Gardiner 1985: 325). However, introspective reports from experimental subjects - and from many cognitive psychologists themselves - suggest that many people are able to recreate vivid mental pictures of scenes they have witnessed, recall snatches of familiar music and imagine the taste of memorable dishes. Leading the argument that such experiences are evidence of a distinct kind of representation is Kosslyn (1980, 1994; Kosslyn et al 2006). Kosslyn draws a distinction between propositional and depictive formats. He suggests that, in contrast to propositional knowledge, depictive representations

are specific to a particular sensory modality and bear a non-arbitrary relationship to what they represent. He emphasises that, while depictive and propositional formats can often represent the same states of affairs, they make different interpretations explicit and accessible (Kosslyn et al 2006: 14), and as such they are suited to different kinds of processing tasks. He illustrates this by comparing a map to a table of inter-city distances (2006: 54), pointing out that when calculating journey times the latter is more useful, but that the former allows one to see at a glance whether three locations lie on a straight line.

Kosslyn has offered a wealth of experimental and neuroimaging evidence to support the idea that the mind can store the same information in multiple formats. For example, having asked experimental subjects to memorise a map containing several distinct locations, he then instructed them to imagine 'scanning' from place to place, and observed that the time taken to comply was proportional to the distance between landmarks. However, when he simply asked participants to verify whether certain locations were depicted, response times were independent of spatial formation (1973, 2006: 26-9). Further evidence for the existence of mental images has been offered by Baddeley (1999: 141: 3), who tested participants' knowledge of the relative location of British cities, and concluded that it was hard to account for the errors they introduced if spatial information was stored in the mind in verbal form. Similar arguments have been made by others (for example Johnson-Laird 1983: 146; Werth 1999: 101, and advocates of 'dual coding theory' such as Sadosky and Paivio 2013).

However, the existence of mental imagery as a distinct form of representation is far from universally acknowledged. One significant opponent is Pylyshyn (1973, 2002, see also Dennett 1991). Significantly, Pylyshyn does not dispute that people experience images. Instead he argues that the images that subjects report do not correspond to a 'primitive explanatory construct' (1973: 2). In Pylyshyn's account of mental representation, underlying both analog mental images and analytic linguistic descriptions is a 'more basic descriptive symbol structure containing perceptual concepts and relations, but having the abstract qualities of propositions' (1973: 7). Pylyshyn's arguments rely both on producing evidence that contradicts that of advocates of mental imagery, and on challenging

the conclusions they draw from their own experiments (see, for example, Pylyshyn's critique of Shepard and Metzler's (1971) classic mental rotation experiment, 2002: 165). Despite Kosslyn's claims (1994) to the contrary, the imagery debate spearheaded by Kosslyn and Pylyshyn remains unresolved.

A further complication stems from the possibility that not all people experience images to the same degree. Kraemer, Rosenberg and Thompson-Schill (2009) have used fMRI data to demonstrate that people who claim to prefer verbal over visual reasoning have higher activation in different parts of the brain when performing certain tasks than people who profess the opposite, and suggest that a tendency to verbal or visual thinking styles will affect later recall. Zeman et al (2015, 2016) have documented the experiences of multiple participants who claim to have very limited ability to form mental pictures, and introduced the term 'aphantasia' to describe subjects who report a lifelong absence of such imagery. D'Ercole et al (2010) have developed a questionnaire-based metric for assessing a subject's ability to construct vivid images, suggesting that this ability varies on a cline. Intriguingly, Zeman's study also suggested that subjects who report forming few mental images are also likely to report having a poor autobiographical memory; a finding which could have intriguing implications for theories of how people form long-term memories of narratives.

The debate about mental imagery is one that has informed cognitive linguistics as well as cognitive psychology, with cognitive linguists drawing on the notion that a distinction exists between propositional and non-propositional modes of knowledge (Jackendoff 1983: 35; Werth 1999: 101). Werth (1999: 102) contrasts propositional knowledge with what he terms 'functional' knowledge, which he defines as 'consisting essentially of a set of *acts*, directed towards some specific goals, or undirected', which may be either physical or conceptual. The examples he gives for such acts include activities as diverse as driving a car or recognising a face. The latter activity could be achieved by comparing one's current visual input to a visual mental image of the kind that Kosslyn advocates. Driving a car would presumably involve a more complex combination of mental processes. Both Jackendoff and Werth emphasise that non-propositional knowledge is often gestalt or holistic in nature, and Werth argues that much functional knowledge is unconscious and difficult to articulate.

Significantly, Werth also suggests (1999: 103) that the process of teaching a skill may involve transforming functional knowledge into propositional knowledge. Again this suggests that the same information can potentially be stored in the mind in more than one format.

Such debates form an important context for ideas I will explore in this thesis. However, as my aim is not to offer a resolution of the imagery debate, I will need to make certain working assumptions in order to advance my thesis. I lay these out in the following section.

2.1.2 - Some Working Assumptions About Mental Imagery

As I noted above, Text World Theory is a theory about the specific mental representations that discourse participants create during discourse. I will therefore be assuming that the representational theory of mind (RTOM) described above holds, and that mental representations are a meaningful way to talk about the products of human cognition.

While few who accept the RTOM would dispute that some mental representations are propositional in nature, a wealth of evidence exists to support the idea that not all mental processes can be explained in terms of logical manipulations of propositional knowledge. While acknowledging that it may be possible to make a case, as Pylyshyn does, that mental images are not primitive explanatory constructs, I plan to proceed by making two more assumptions. The first of these is that the same information can be stored in the mind in more than one way. The second is that different cognitive processes may be employed for manipulating mental representations, some of which - but not all - result in the experience of mental imagery. Given these assumptions, I suggest that it makes sense to treat mental images as meaningful mental constructs, even if they are not primitive ones. Furthermore, I suggest this is a productive strategy to adopt when attempting to account for the process of discourse comprehension, given that, as I will demonstrate in later chapters, the experience of imagery also forms an important part of readers' accounts of their reading experiences.

For these reasons, I will be using the following working definitions in this thesis. I will use the term 'mental representation' as an umbrella term to cover any form of knowledge stored in the mind,

regardless of syntactic formal properties. I will use the term 'mental image' to refer to an iconic mental representation, as opposed to a propositional one, noting that mental images can occur in different perceptual modalities including emotional experiences. Finally, I will use term 'mental picture' to refer to a mental image which is experienced only through the visual modality.

One more assumption will be pertinent to this study. A further claim that is frequently made about mental representations is that they are compositional: in other words that 'the content of complex representations is "composed from" the contents of their representational constituents' (Von Eckhart 2012: 9). A full summary of the implications of compositional representations, and the debate about whether it is possible to distinguish atomic and molecular mental representations (Fodor and Pylyshyn 1988: 12), is beyond the scope of this thesis. For the purposes of my argument however, I note that scholars have presented evidence that complex mental representations can be multimodal. For example, Nanay (2018: 125) suggests that multimodal mental images are an essential feature of almost all instances of everyday perception, illustrating the point with the example of a person hearing the sound of a coffee machine at the same time as seeing it. This idea will be important later in this thesis, as I consider how different linguistic cues are combined to create complex text-world mental representations.

Having established these initial assumptions, I am now in a position to explore how the notion of mental representation, along with other tenants of cognitive psychology, have influenced theories of linguistics in the past few decades.

2.2 - Key Concepts in Cognitive Linguistics

In the previous section I noted how a shift from a behaviourist to a cognitive paradigm allowed psychologists to begin thinking about mental representation in rigorous ways. This increased interest in how knowledge is represented in the mind also resulted in a new cognitive approach to linguistics that has continued to evolve since the 1970s (Fauconnier 1985, 1997; Fauconnier and Turner 2002; Fillmore 1977, 1985; Herman 2003; Lakoff 1987; Lakoff and Johnson 1980a, 1980b; Langacker 2008;

Werth 1995, 1999). In this section, I discuss some of the key tenets of cognitive linguistics which have paved the way for Text World Theory, which I introduce in detail in the next chapter.

Cognitive linguistics diverges from earlier linguistic paradigms in two key respects. The first difference emerged as a consequence of a growing interest in artificial intelligence, and in efforts to teach computers to process natural language (Cook 1994; Emmott 1997; Minsky 1975; Schank and Abelson 1977). Such attempts quickly demonstrated the role that context and knowledge play in language comprehension. Earlier frameworks of structural and generative linguistics treated language as an autonomous system, the rules of which could be studied in isolation (Fauconnier 1997: 4). By contrast, cognitive linguistics emphasises that naturally occurring language cannot be understood in the absence of discourse contexts, and of prior knowledge structured in particular ways (Bransford and Johnson 1972; Croft and Cruse 1995; Duchan et al 2012; Fillmore 1977, 1985; Gardiner 1985; Gavins 2001, 2007; Herman 2002; Schank and Abelson 1977; Semino 1997; Werth 1999).

A second principle of cognitive linguistics is that the mind does not have an independent system devoted exclusively to language processing, but that language processing makes use of the same cognitive strategies that humans use to understand the world more generally (Croft and Cruse 2004; Harrison et al 2017).

[...]the representation of linguistic knowledge is essentially the same as the representation of other conceptual structures, and [...] the processes in which that knowledge is used are not fundamentally different from cognitive abilities that human beings use outside the domain of language (Croft and Cruse 2004: 2)

For this reason, there is considerable overlap between cognitive linguistics and cognitive psychology, meaning it is not possible to talk about language comprehension without addressing more general questions of how the human mind functions. Thus, cognitive linguistics shares with cognitive psychology a central interest in how humans store and draw upon knowledge. In addition to questions

of the nature of mental representation, as discussed in 2.1, it also concerns itself with how knowledge is organised into larger scale structures.

As humans, we build knowledge through our embodied interactions with the world (Neisser 1967, for broader philosophical perspectives see Merleau-Ponty 1945; Nagal 1974). As embodied beings, we never have exactly the same experience twice. If we are to navigate our surroundings, our minds must develop strategies for determining how our current sensory inputs resemble previous experiences. The apparent ease with which we identify something as familiar - for example, the face of a friend who has aged since we last saw them, or the plot of a film that has been adapted from a book we have read - masks layers of cognitive process. Fauconnier and Turner remind us that 'the recognition of identity, sameness, equivalence, $A=A$ [...] is in fact a spectacular product of complex, imaginative, unconscious work' (2002: 6).

In Sections 2.2.1 and 2.2.2, I introduce the ideas of conceptual categories and schemata; two different accounts of how knowledge is structured in the mind. In the remaining subsections, I offer summaries of cognitive linguistic frameworks that attempt to explain how discourse participants combine linguistic cues with background knowledge in order to comprehend discourses.

2.2.1 - Conceptual Categories

One strategy that enables people to compare present and past experiences is the ability to divide those experiences into categories. When navigating around an unfamiliar city, it is useful to be able recognise members of the BUS category, and to understand that members function in the same way as busses in one's home town. It is also useful to understand that much of what one has learned about busses can also be applied to other examples of a broader PUBLIC TRANSPORT category. Such category judgements are not trivial, since members of the same category usually resemble each other in some respects but not in others. For example, two members of the BUS category may differ drastically from each other in appearance even though they share the same purpose.

Under what is now termed the 'classical' model of categories (Croft and Cruse 1983: 76), category membership was defined by 'necessary and sufficient conditions'. For example, a BUS would have the necessary (though not sufficient) properties of being [HOLLOW] and [MOBILE]. In such a model, the word 'bus' could thus be separated into discrete 'semantic features' (Jackendoff 1983), and given a sufficiently comprehensive list of such features, one could say with certainty whether or not the proposition 'There is a bus here' was TRUE.

However, analysis of natural language quickly reveals that this approach does not reflect the way that humans make category judgements in the real world. An alternative theory of categorisation has its roots in the philosophy of Wittgenstein (1953) and the experimental work of Rosch and others (Berlin 1878; Brooks 1978; Lakoff 1987; Rosch 1978; Rosch and Lloyd 1978; Rosch and Mervis 1975; Roth and Bruce 1995; Tversky and Gati 1978). The need for this new approach is demonstrated by an oft-cited example offered by Fillmore (1977: 67). In a classical category model, the category BACHELOR might be defined by the necessary and sufficient properties of [HUMAN], [ADULT], [MALE] and [UNMARRIED]. However, the fact that we do not tend to regard priests as bachelors demonstrates that the BACHELOR category must be more loosely constructed.

In this 'prototypical' model of category structure, category membership is not a binary attribute. Instead, members of the same category tend to display what Wittgenstein terms 'family resemblances' (1975). As with members of a family, distinctive features tend to be shared by most members but not by all. Thus category members show graded centrality, with some being regarded as good examples of category membership, some regarded as less good, and those at the centre of the prototype structure sharing most resemblances and achieving prototypical status.

One consequence of accepting the graded centrality model over one governed by necessary and sufficient conditions is that a subject's judgement of 'good' category membership may depend on personal experience. Croft and Cruse illustrate this by suggesting that for British subjects, a DATE is a poor example of a fruit, but for Jordanians it is much more highly prototypical (Croft and Cruse 2004: 78). In this model, notions of category can evolve as a result of subsequent experience. For example,

subjects of a certain age are likely to make different judgements about what constitutes a prototypical COMPUTER than they did in the 1970s.

Another significant feature of the prototype model is that it acknowledges how categories are defined partly by embodied human experiences. According to Rosch (1978), categorisations occurs at different 'levels of abstraction' , with any one item or experience belonging to a number of more and less general groupings. For example, members of the category CHAIR can be divided into sub-types such as ROCKING CHAIR or GARDEN CHAIR. They can also be grouped with TABLES and other items into to the broader category of FURNITURE. Of these, one level of categorisation can usually be considered 'basic', with CHAIR being the basic level category in the example given here. This level is distinguished not only by linguistic features (basic category names tend to be shorter and are learned earlier in childhood, Croft and Cruse 2004: 83), but also by the fact that it is the most detailed level at which people tend to interact with every category member using the same bodily movements (Rosch 1977: 33). The importance of embodied experience to category perception explains why the most salient thing about a TABLE is not that it is likely to have four legs and a flat surface, but that it is something at which a human can sit at when working or eating, and explains why upturned boxes and large rocks can fairly be described as tables under the right conditions.

The fact that humans comprehend the world by making category judgments affects many different elements of language comprehension. Phoneme judgements are categorical, with speakers of different languages imposing category boundaries differently (Andrade and May 2004: 85). As the discussion above demonstrates, word meanings are categorical rather than logical. Category-type judgements are also important when it comes to questions of literary genre (Cook 1994; Dubrow 1982; Gavins 2013; Mason 2019; Norledge 2022; Steen 2011; Stockwell 2014). The concept of genre is used to assign texts into groups based on similarities, and - like Rosch's categories - tends to be applied at different levels of abstraction. Thus, the concept of genre is used to identify both the novel, as distinct from poetry and plays, and to differentiate sub-categories of novel such as romances or detective fiction. Books which fall into the detective fiction category tend to share similar attributes, but not all

books that are commonly labelled as detective fiction will include every element associated with the genre. The concept of genre is used in both academic and non-academic discussions of literary texts. Genre judgements can also shape a reader's interpretations of a text. In Chapter 6, I will explore the idea that readers who attempt to read Atwood's *Surfacing* as a detective story pay more attention to particular elements of the text during their moment-by-moment reading experience, and foreground these above other features in subsequent summaries of the novel.

2.2.2 - Schema Theory, Frames and Scripts

The theory of conceptual categories outlined above provides an account of how people make category judgements about individual items or experiences. However, our knowledge about the world contains information not only about what entities are in it, but also how they tend to be related to each other (Fillmore 1985; 223; Minsky 1985; 204; Nessler 2014: 273). Cognitive scientists have therefore proposed additional kinds of knowledge structures to account for how humans draw on previous experiences. A comprehensive overview of different proposed knowledge structures is beyond the scope of this thesis, but here I compare three key concepts that have been adopted in cognitive accounts of literary comprehension.

One early study of particular importance to this thesis is Bartlett's *Remembering: A Study in Experimental and Social Psychology* (1932). Bartlett conducted a series of experiments into how subjects remembered different kinds of stimuli, including faces and abstract shapes as well as written texts. In several discrete experiments into narrative recollection, he presented volunteers with short stories to read and recall. In one of these, the North American folk-tale, 'The War of the Ghosts', was read by twenty participants and remembered after intervals varying from fifteen minutes to ten years. Bartlett's stimuli were deliberately chosen to represent cultural traditions unfamiliar to his participants. Evaluating the various discrepancies between participants' responses and his source materials, he suggested that many differences he observed, even after short time intervals, were likely to be caused by participants attempting to match the stories they read to stereotypical story

structures they had already internalised. Bartlett describes this process as epitomised by responses such as 'Yes, that's a story of "The House that Jack Built" type' (1932: 83). He then suggests:

The form, plan, type, or scheme of a story seems, in fact, for the ordinary, educated adult to be the most dominant and persistent factor in this kind of material. (Bartlett 1932: 83)

Bartlett suggested that the summaries of remembered stories that subjects produce tend to become shorter and less detailed over time. Summaries are also likely to become more coherent and contain clearer causal links; a tendency Bartlett described as 'effort after meaning' (1932: 84). Significantly, he also noticed a tendency for participants to substitute unfamiliar elements with elements familiar from their own cultures or cultural narratives. Summarising his studies as a whole, Bartlett concludes that '[r]emembering is not a completely independent function, entirely different from perceiving', and that both involve elements of constructivist thinking (1932: 13). He then proposes adopting the concept of a 'schema' (plural 'schemata') to describe the generalised impressions that subjects build of typical experiences (205-12). He suggests that such structures play a role in both classifying current experiences, and in recalling them.

[...] an individual does not normally take up such a situation detail by detail and meticulously build up the whole. In all ordinary instances he [or she] has an overmastering tendency simply to get a general impression of the whole; and, on the basis of this, he [or she] constructs the probable detail (Bartlett 1932: 208)

Bartlett's theory of schemata represents a landmark in theories of knowledge structures in the mind, and his work is also important in the development of theories of memory, as I discuss in Section 2.3.

Another important attempt to explore ways in which knowledge structures are stored in the mind was made by Schank and Abelson in their seminal *Scripts, Plans, Goals and Understanding*

(1977). Schank and Abelson describe their study as an intersection of psychology and artificial intelligence, and a significant motivation for their research was to explore how a computer can be programmed to 'understand and interact with the outside world' (1977: 1). As such, the theory they offer does not represent an attempt to explain observations of real human behaviours. However, at a broad level their work echoes many features of Bartlett's schema model. It is also significant in the history of cognitive literary studies as it represents an early cognitive model to be applied to theories of linguistic comprehension (Stockwell 2002: 77).

Schank and Abelson begin by noting that the process of extracting meaning from even simple sentences requires knowledge that is not contained within the sentence itself (1977: 9). Instead, as individual sentences are built up into longer discourses, speakers and writers typically leave out information that can be inferred (22). Schank and Abelson suggest that one way in which such discourses are comprehended is with reference to an internalised 'script': a 'large conceptual unit' comprising of 'a predetermined stereotyped sequence of actions that defines a well-known situation' (38-41). They illustrate this with a much-cited example of talking about a visit to a restaurant. While no two restaurant visits are identical, most include common events such as browsing the menu or asking for the bill, which generally occur in the same order. Retrievable knowledge structures such as a 'restaurant script' confer several advantages. In the real world, they enable individuals to respond appropriately in novel situations - such as visiting a restaurant they have never been to before - by applying knowledge that is applicable in multiple situations. In discourse comprehension, they enable listeners and readers to draw upon background knowledge to 'fill gaps', meaning, for example, that speakers and writers do not need to explain the purpose of a waiter every time they make reference to one. Scripts tend to have 'slots' that can be filled. For example, the 'role' of waiter can be taken by a character who is named in the discourse, or by a default unnamed actor (41 & 132). Thus, a listener's or reader's knowledge about a particular entity under discussion can stem partly from their knowledge of its intrinsic properties, and partly from their knowledge about the role that it plays in a script that is 'instantiated' as discourse progresses.

Though Schank and Abelson offer their theory of scripts as an account of how knowledge about a broad range of experiences might be stored, the authors note that different kinds of knowledge may necessitate different kinds of mental structures:

We must be wary of the possibility that knowledge in one domain may be organised according to principles different from knowledge in another. [...] A desire for generality and elegance might inspire a theorist to seek a 'universal' knowledge system. But if you try to imagine the simultaneous storage of knowledge about how to solve partial differential equations, how to smuggle marijuana from Mexico, how to outmanoeuvre your opponent in a squash game [...] you will begin to glimpse the nature of the problems. (Schank and Abelson 1977: 3)

We can therefore contrast Schank and Abelson's more narrow concept of a script with the more general term schema; the latter being a broad category that has been widely adopted by cognitive psychologists, and which potentially encompasses knowledge structures of different kinds:

Schemata are data structures for representing the generic concepts stored in the memory. They exist for generalised concepts underlying objects, situations events, sequences of events, and sequences of actions (Rumelhart and Ortony 1977: 101)

The term 'script', by contrast, tends to be used in a more narrow sense, to refer specifically to knowledge about events that happen in chronological sequence. This term has also been adopted by scholars seeking to apply cognitive linguistic principles to explain literary comprehension:

A script is a memory structure that specifies the list of actions people perform in repeated situation. (Gerrig and Egidi 2005: 40)

This more precise conceptualisation is acknowledged by Werth (1999: 161), who suggests that a restaurant script does not contain everything it is possible to know about restaurants, and suggests that a restaurant script comprises just one part of a broader restaurant 'frame' (1999: 161).

The term 'frame' is another that has been used to describe broad classes of knowledge structures, and has evolved within both cognitive linguistics (Fillmore 1982) and artificial intelligence (Minsky 1985). Minsky proposes that frames are 'structures we've acquired in the course of previous experience [...] representing some stereotyped situation' (1985: 244). Crucially he claims that frame recognition involves an element of 'gestalt' understanding, in which a whole is recognised as something categorically different to the sum of its parts (1985: 328). For Minsky, frames are crucial for explaining how processes such as facial recognition or sentence comprehension happen almost instantly. This notion is echoed by Fillmore, who also emphasise that one cannot comprehend any element of a frame without understanding the whole:

By the term "frame" I have in mind any system of concepts related in such a way that to understand any one of them, you have to understand the whole structure in which it fits
(Fillmore 1982: 111)

Fillmore goes on to suggest that story comprehension is a process in which linguistic prompts activate particular frames, allowing listeners or readers to assign particular referents to roles in particular frame slots. The concept of frames is also used by Werth, who hints at their gestalt nature:

Frames are whole chunks of experience and situations, codified and stored in memory as single items (Werth 1999: 20)

Frames are also invoked by Fauconnier, who suggests that same utterances can take on different meanings when understood in the context of different frames (1985: 80).

The notion of frames, as outlined here, clearly overlaps with Bartlett's description of schemata. However, it is worth noting that Emmott (1997), in her account of narrative comprehension, uses these terms in distinct senses. For Emmott, schemata are 'complex general knowledge structures' that are invoked during reading (1997: 23). She also suggests that in addition to utilising such general knowledge, readers can also create schemata for individual texts. She then introduces the notion of a 'contextual frame' to refer to a mental representation which provides 'information about a configuration of characters, location, and time at any point in a narrative' (1997: 104), and goes on to use the shorthand 'frame' in this more specific sense. Though Emmott's use of the term also describes a process by which background knowledge is applied to discourse comprehension, the frames Emmott invokes rely on knowledge specific to a particular text or discourse context, rather than knowledge of the world in general. Given the significance of Emmott's work in the development of Text World Theory (particularly through her discussion of 'frame switches' and 'frame repair' - see Chapter 3), I therefore avoid the term 'frame' when considering the application of general knowledge during discourse comprehension, and instead restrict myself to the term 'schema' to refer to broad classes of knowledge structures which capture generic experiences.

While concepts such as 'schema', 'script' and 'frame' have explanatory power, it is important to note that constructed examples such as the restaurant script do not necessarily correspond to actual cognitive structures. As Semino notes, there is a sense in which both scripts and schemata are merely metaphors that enable us to talk about lower-level patterns of organisation in neural networks (1997: 185 and 2001: 353). Nonetheless, a body of evidence exists to support the idea that knowledge structures of some kind shape human cognition (for a summary, see Eysenck & Keane 2020: 499-501).

One idea to emerge from the application of schema theory to literary criticism is Cook's notion that literary texts can play a role in schema construction or revision. For Cook, discourse comprehension is not merely a process in which static background knowledge is applied to a particular discourse context, but one in which current discourses can alter 'pre-existing mental representations' (1994: 4). Cook goes on to suggest that individual texts can be viewed as either 'schema reinforcing',

'schema preserving' or 'schema refreshing', depending on whether they prompt readers to reinforce or re-evaluate their existing knowledge of the world (1994: 10). He also makes the claim that texts which come to be regarded as 'literary' tend to be those which alter existing schemas rather than reinforce them (1994: 4). This idea has since been challenged, notably by Semino (1997:152, 2001), who suggests instead that literary texts exist on a cline from schema reinforcement to schema refreshment. However, Cook's model does provide a useful context through which to view Atwood's oeuvre. As I discuss in more detail in Chapter 5, Atwood makes frequent use of intertextual references throughout her novels; a strategy which not only takes advantage of readers' existing conceptions of texts such as fairy tales or gothic fictions, but also prompts them to think about these genres in new ways.

2.2.3 - Conceptual Metaphors

The concept of metaphor has been a key element of literary criticism since the classical era, and can be defined as 'the use of one expression to refer to a different concept in a way which is still regarded as meaningful' (Stockwell 2002: 105). Traditionally, literary scholars have viewed metaphor as a distinctive feature of literary writing, and distinguished novel metaphors which encourage readers to see the world in new ways from 'dead' metaphors 'which are used so habitually that their metaphorical force becomes almost invisible to us' (Short 1996: 32). However, cognitive linguists have argued that metaphorical language of all kinds in fact reveals something fundamental about ways in which we make sense of the world.

According to Conceptual Metaphor Theory (Johnson 1987, Lakoff 1987, Lakoff and Johnson 1980a, 1980b), people frequently make sense of abstract concepts in terms of more basic physical concepts of which they have first-hand experience. Cognitive linguists claim that evidence for this process can be found in everyday language use. One frequently discussed example of this phenomenon is the way in which people frequently talk about time as if it were a spatial dimension, using expressions such as 'putting the past behind you' or 'looking forwards' (Gavins 2007: 37). In

other words, the conceptual metaphor TIME IS SPACE is claimed to be more than merely creative language use, and instead represents a fundamental way in which people make sense of the world.

For Lakoff and Johnson, many of the conceptual metaphors we use are not arbitrary, but stem from our experience of existing in the world as embodied beings. For example, the pervasiveness of HEALTH IS UP / SICKNESS IS DOWN metaphors, which manifest in language such as ‘in the peak of health’, or ‘he came down with the flu’, stems from a universal human truth that serious illness or death causes us to lie down (Lakoff and Johnson 1980a: 15). However, this lack of arbitrariness does not necessarily imply that particular metaphorical mappings are inevitable or inescapable. Single concepts, or ‘target domains’, can often be understood in terms of different ‘source domains’. Lakoff and Johnson illustrate this when they discuss alternative ways of thinking about ideas, including IDEAS ARE PEOPLE (which manifests in ‘cognitive science is still in its infancy’), and IDEAS ARE PLANTS (which manifests in ‘his ideas have finally come to fruition’) (1980a: 47). This cognitive flexibility accounts for the fact that, even though many powerful conceptual metaphors become conventionalised, literary texts can still have a ‘defamiliarising’ (Cook 1994; Miall and Kuiken 1994; Schklovsky 1917; Van Peer 1986) or ‘estranging’ (Norledge 2019: 158, 2022: 16; Suvin 1979) effect, causing readers to conceptualise the world in new ways.

In Chapter 6, I explore how conceptual metaphors such as LIFE IS A JOURNEY and THE SELF IS A LANDSCAPE may shape readers’ interpretations of Atwood’s *Surfacing*, and may inform their long-term memories of the text.

2.2.4 - Mental Spaces

In Section 2.2.2, I considered the different ways in which knowledge is represented in the mind, and argued that the ability to compare current sensory inputs to stored representations of typical experiences is an essential requirement for navigating the world. The strategies I discussed are essential for discourse processing, but are not sufficient to account for it. Humans often use language to discuss the states of affairs in which they currently find themselves, making reference to real

physical objects in the vicinity. However, they are also able to talk and write about scenarios that occur at other times and places, conduct meaningful discourses about events that have not happened, and discuss abstract concepts for which have they have no direct phenomenological experience. The notion of 'mental spaces' (Fauconnier 1985, 1997; Fauconnier and Turner 2002) is one cognitive model that has been proposed to account for these abilities.

According to Fauconnier, a mental space is a cognitive artefact, distinct from a linguistic expression, which is built during discourse to represent what that discourse is about (1997: 34). In his original formulation of the mental space model, Fauconnier drew on Set Theory as a theoretical grounding:

In the model, mental spaces will be represented as structured, incrementable sets - that is sets with elements (a, b, c...) and relations holding between them (R_{1ab} , R_{2a} , R_{3cbf} ...), such that new elements can be added to them and new relationships established between their elements. (Fauconnier 1985: 16)

We might approximate this by saying that mental spaces are cognitive structures in which people keep track of entities and of the relationships between them. It is worth noting, however, that while Fauconnier grounded his argument in formal logic, he took pains to distinguish mental spaces from logical constructs. Significantly, he emphasised that mental spaces are not - and do not represent - possible worlds (1985: 37). (I will discuss possible worlds and their relationship to formal logic in Chapter 3). Fauconnier also emphasised that mental spaces cannot be equated with underlying semantic meanings of linguistic expressions - what Chomsky would have referred to as the 'deep structure' of a sentence (Chomsky 1964; Pinker 1994). Instead, mental spaces are constructed during discourse, and created from both the linguistic expressions that trigger them and from a participant's background knowledge and knowledge of the discourse context. In other words, mental spaces are underdetermined by the linguistic expressions that give rise to them.

Many of Fauconnier's arguments in favour of the mental spaces model rest on its ability to account for the ambiguities that can occur when linguistic expressions are considered out of context. One example of this is his analysis of differing 'transparent' and 'opaque' readings of the sentence 'Oedipus believes he will marry his mother' (1985: 49-51). It is not clear from this linguistic prompt alone which of two possible scenarios is true. In the transparent reading, Oedipus believes he will marry someone that he believes (correctly or incorrectly) to be his mother. In the opaque reading, Oedipus believes he will marry the person who is actually his mother (whether or not he himself knows this fact). In Fauconnier's model, this ambiguity results from the fact that the modal verb 'believes' requires the reader to conceptualise two discrete states of affairs - in other words, to set up two mental spaces - one containing Oedipus in the act of believing, and the second containing that which Oedipus believes. Ambiguity is caused by the fact that the linguistic prompt alone does not specify in which of the two spaces the entities Oedipus and Oedipus's future wife are connected by a mother-son relationship. This cognitive account of comprehension accounts for the two possible meanings of the single sentence in a way that previous accounts of sentence parsing had not.

A further benefit of the mental spaces framework is that it provides an account of how people keep track of the multiple states of affairs that can be spoken or written about during a single discourse. Even in simple conversations, participants might switch attention rapidly between talking about the current discourse setting, events that happened yesterday, events that may happen tomorrow, and events that could have happened had things had turned out differently. Readers of a novel are often required to keep track of hundreds of spatial and temporal settings, as well as any number of hypothetical scenarios. According to Fauconnier, discourse participants achieve this by creating and updating multiple mental spaces. Different grammatical structures can act as space builders prompting new mental spaces (Fauconnier 1985), including prepositional phrases ('In Margret's mind', 'in Toronto', 'in 1929'), adverbs ('probably', 'possibly') and verbs of cognition ('she believed', 'she hoped'). However, Fauconnier emphasises that mental space construction is not a

deterministic process, and cites numerous examples of linguistic prompts which can give rise to multiple configurations of elements and mappings.

In Fauconnier's model, the mental spaces which are constructed from a single discourse are structured hierarchically. Each new space is set up as a subordinate to the 'parent space' from which it is created, and inherits many of its properties:

Structure from the parent space is transferred to the new space by default [...] The default transfer, called *optimisation*, will apply to the extent that it does not contradict explicit structure in the new space. (Fauconnier 1997: 43)

'Structure', in this context, refers to elements within a space and to the relationships between them. In a similar manner, Fauconnier suggests that some information can also 'float' back up to parent spaces. However, whereas subordinate spaces inherit all structure from parent spaces by default, parent spaces only inherit the presuppositions entailed by the linguistic statements that define subordinate spaces, again with the caveat that they must not contradict any pre-existing structure (1997: 61). Presuppositions are defined as 'the necessary preconditions or assumptions made in speaking or writing an utterance' (Wales 2014: 341; see also Werth 1993 for a discussion of problems with the concept of presupposition in cognitive accounts of comprehension).

We can demonstrate these principles with an example. The following description occurs in Atwood's *The Blind Assassin*:

Today I went again to the cemetery. Someone had left a bunch of orange and red zinnias on Laura's grave; hot-coloured flowers, far from soothing. They were withering by the time I got to them, though they still gave off their peppery smell. I suspect they'd been stolen from the flower beds in front of The Button Factory (TBA 103)

In this example, the first three sentences prompt the reader to establish a mental space containing the narrator (Iris), a cemetery containing Laura's grave, and a bunch of orange and red flowers. The verb 'suspect' then prompts the reader to create a subordinate mental space, and a process of optimisation allows the reader to map the anaphoric pronoun 'they' to the flowers that have been inherited, along with other elements, from its parent space. The clause that begins 'they'd been stolen from the flower beds...' prompts the reader to update the subordinate mental space with the new information about the flowers. In Fauconnier's model, the revelation that the flowers are stolen does not float back to the parent space, since the reader does know for certain whether or not Iris's suspicion is correct. However, the presupposition entailed by this subclause; that the Button Factory has flowerbeds outside, may float up, and readers may update their representation of the parent space accordingly. I will discuss examples similar to this in my analyses of reader summaries of Atwood's narratives in Chapter 6 and 7. In his discussion of float, Fauconnier suggests that structures can float up through multiple 'parent' and 'grandparent' spaces if it not contradicted; a notion that will be salient to the arguments I will make in the following chapters.

Fauconnier suggests that, although a single discourse may prompt the creation of many spaces, only one space will be in 'focus' at any one moment (1997: 49). This is the space which is currently being structured by discourse elements, and on which the participant's attention is fixed. However, the principle of float suggests that discourse participants may be able to update multiple mental spaces simultaneously as discourse progresses, even if only one is the subject of conscious focus.

In addition to the space which is currently in focus, Fauconnier's framework identifies two more significant spaces. The 'base' space is the 'starting point for the construction to which is it always possible to return', and which 'is presented as corresponding to reality, or "reality" within fiction' (1997: 49-50). Alongside the base and focus exists the 'viewpoint'; the space from which the space in focus is set up. In example 1 above, Iris's statement of her suspicion that the flowers are stolen results

in a focus space distinct from the base space representing the reality of her world. In more complex configurations, all three spaces may be distinct.

As I have demonstrated, the mental space framework provides an account of how participants keep track of multiple states of affairs during discourses. However, the framework is primarily a model of real-time discourse processing. Fauconnier acknowledges that discourse participants may switch their focus away from a given space and then back to it. However, he does not address the question of how states of affairs represented in the form of a mental space are stored in or retrieved from the memory.

Fauconnier's mental space framework is a direct antecedent of Text World Theory (Gavins 2007; Werth 1999: 20). However, one of Werth's motivations for formulating his own framework was to cope with limitations in the mental spaces model. Specifically, he notes that 'interesting and important though Fauconnier's work is, like most existing work in cognitive linguistics, it would benefit from an out-and-out discourse perspective' (1999: 182). One implication of this is the requirement to consider more rigorously the fact that discourse participants do not interpret language in isolation but draw on awareness of the discourse context and on their own background knowledge. Werth devotes considerable attention to this, as I will discuss in the following chapter. However, a second implication of considering discourse rather than isolated fragments of language is that mental representations evolve as discourses progress. The question of what happens as text-worlds - and by extension, mental spaces - are stored in and retrieved from the long-term memory will form a major part of my discussion in the following chapters. As part of my discussion, I will argue that Fauconnier's notions of 'consolidation' and 'float' can be usefully adopted by Text World Theory.

2.2.5 - Conceptual Integration Theory

Like conceptual metaphor theory (Section 2.2.3), conceptual integration theory (Fauconnier and Turner 2002) provides an account of how humans compare entities or experiences that are alike in some ways but unlike in others. However, rather than simply providing an account of metaphorical

thinking, the authors claim it offers a broader account of human cognition, and suggest that the process of conceptual integration is a fundamental element of human creativity.

Conceptual integration - sometimes referred to as conceptual blending - involves a process of creating a 'conceptual integration network' which draws upon two discrete 'input spaces' (2002: 40-4). Each input spaces consists of a mental space, which Fauconnier and Turner define in this context as a 'small conceptual packet constructed as we think and talk, for the purposes of local understanding and action'. The authors suggest these are often linked either to long-term schematic knowledge frames or to specific memories (40). The two input spaces are then linked through a series of 'cross-space mappings' in which some concepts in the first input space are seen as having counterparts in the second. This process results in the creation of two novel mental spaces. A 'generic space' contains only those concepts that the two input spaces have in common. The second novel space is known as the 'blend', and contains both elements from the two input spaces, plus emergent structure that is novel to the blend. This allows the subject to conceptualise one or both of the inputs in new ways by mapping elements of the emergent structure back into the input spaces.

Conceptual integration networks of this kind can be used to account for examples of metaphorical thinking. For example, Fauconnier and Turner describe how an input space containing two businesses can be blended with an input space containing a boxing match, with two CEOs mapped onto the two sparring fighters. This provides a novel way of understanding businesses competition (126). However, conceptual integration can also be deployed in many other kinds of creative thinking. To illustrate this point, the authors describe a solution to a mathematical puzzle about a monk who travels along a road in different directions at different speeds on different days (39). The puzzle challenges solvers to work out whether or not the monk ever arrives at the same point on his journey at the same time of day. The solution is laborious to calculate using traditional mathematical approaches, but becomes trivial if one creates a blend using the two discrete journeys as input spaces, and produces a blend in which two monks make simultaneous journeys and cross paths on the same day.

One important claim made by Fauconnier and Turner is that the process of establishing cross-space mappings between two input spaces is not deterministic, with many different combinations of cross-space mappings possible for any given pair of input spaces. The authors suggest that a lot of mental work can often be done testing and rejecting possible projections before subjects arrive at blends that in retrospect look intuitive (71-2). This fact also means that two people generating novel blends from the same input spaces will not necessarily achieve the same results.

Conceptual integration theory has many applications within cognitive stylistics. It can explain the application of schematic knowledge during narrative comprehension, as happens for example when readers create mappings between individual characters and generic roles such as 'detective' and 'victim' in a generic template, to create an emergent blend in which narrated events are understood as an example of a detective story. I will draw up on several such examples as I explain readers' often differing schematic interpretations of Atwood's storylines in Chapters 6 and 7. Conceptual integration theory is also used by text-world theorists to account for aspects of discourse comprehension, and will be crucial to my account of how Text World Theory might be expanded in Chapter 8.

2.2.6 - Situation Models

In laying the foundations for his mental space framework, Fauconnier provides many examples of hypothetical utterances that illustrate the need for a model that departs from previous theories of language comprehension. However, the majority of his examples involve units of discourses that are no more than a single sentence in length. This is not to say that Fauconnier overlooks the importance of prior discourse in comprehension: indeed, he provides multiple examples of how the same expression can be interpreted differently in different discourse contexts. However, Fauconnier's analyses tend to treat information gleaned from prior discourse as given, and then focus on how the mental spaces framework explains how individual sentences can yield different meanings.

By contrast, situation models (Graesser et al 1997; Kintsch 1988, 1995; van Dijk and Kintsch 1983; Zwaan et al 1995; Zwaan and Radvansky 1988) are primarily an attempt to account for how longer units of discourse are represented dynamically in the mind. Van Dijk and Kintsch, who introduced the framework, begin with many of the same assumptions as Fauconnier. They acknowledge that discourse participants use background knowledge as well as textual prompts to construct meaning, but emphasise that as well as knowledge of the world, participants also bring knowledge of how discourses work (van Dijk and Kintsch 1983: 5). They also emphasise that discourses do not occur in isolation, and suggest that participants are guided in their meaning construction by assumptions about what the speaker or writer intended the listener or reader to understand (van Dijk and Kintsch 1983: 7).

Given these assumptions, van Dijk and Kintsch's starting point is then to distinguish between a listener's or reader's representation of the text itself, and their representation of what that text is about:

Suppose someone witnesses a car accident. We assume that such a person constructs a mental representation of that accident [...] Now, suppose that another person hears a story about the same accident. We assume that understanding such a story also involves the construction of a mental representation of the story. Of course, a representation of the accident itself and a representation of the story about the accident will not be identical. (van Dijk and Kintsch 1983: 4-5)

The authors therefore distinguish between two types of representation; the 'textbase' and the 'situation model':

...input is decoded into a list of atomic propositions which are organised into larger units on the basis of some knowledge structure to form a coherent text base [sic]. From this

text base a macrostructure is constructed which represents the most essential information in the text base [...] In parallel with this hierarchical textbase a situation model is elaborated, which integrates the comprehender's existing world knowledge with the information derived from the text that is being processed (van Dijk and Kintsch 1983: x)

In proposing this model the authors reconceptualise language, seeing it not as 'information to analyse syntactically and semantically and then store in memory', but as 'a set of processing instructions on how to construct a mental representation of the described situation' (Zwaan and Radvansky 1998: 162). Significantly, van Dijk and Kintsch argue, the distinction between the textbase and the resulting situation model representation forms an important part of what is remembered when a discourse is recalled:

[...] the end point of comprehension is a multilevel processing record, which includes the memory traces of the actual linguistic input, of the meaning of the text both at a local and a global level, and of the effect the text had on the comprehender's world knowledge (van Dijk and Kintsch 1983: x)

Having made the case that situation models exist, I now consider what they are comprised of. Kintsch proposes that they consist of 'a mental representation of the information provided by a text that is integrated with [the reader's] knowledge, beliefs and goals', and which 'consist of concepts and propositions (complex terms which establish some sort of relation between concepts and/or other propositions) forming an interrelated network' (Kintsch 1995: 140). Zwaan and Radvansky expand this, suggesting that situation models function on at least five different dimensions allowing participants to track time, space, causality, intentionality and protagonists as discourse unfolds (1988: 167).

There are clear parallels between this definition and Fauconnier's conception of mental spaces as constructs containing 'elements' and 'relations holding between them' (see Section 2.2.4).

However, while mental spaces are treated as constructs in working memory (Fauconnier and Turner 2002: 102), advocates of situation models have paid considerable attention to how complex mental representations might be built up during the comprehension of long discourses (Kintsch 1995; van Dijk and Kintsch 1983). The need to integrate information across multiple sentences is cited as one reason why situation models are needed in accounts of comprehension (Zwaan and Radvansky 1988: 163). Zwaan and Radvansky offer an account of how representations in the working memory are used to update an integrated situation model in the long-term memory (1988: 165-7), which contains a mixture of information drawn from the text and inferences that have been drawn as a result.

Clearly, the notion of a situation model provides one theoretical framework with which we might begin to consider representations of narrative in the long-term memory. The notion that readers maintain separate representations of discourse and of what discourse is about may also be useful to studies of literary narratives; in particular those that can be read as examples of 'unreliable narration' (Booth 196; Rabinowitz 1977; Phelan 2005, 2017; and Chapter 6 of this thesis). I will explore this further in my discussion of Atwood's *Surfacing* in Chapter 6.

In addition, one more justification that has been offered for the necessity of situation models is that they offer an explanation of how speakers and readers are able to learn about situations from more than one source. In other words, individual discourses may not always result in the creation of a new situation model, but can involve the updating of an existing one (van Dijk and Kintsch 1983: 342). This point is expanded by Zwaan and Radvansky:

When we read a newspaper article about a particular event, we may come away with a similar understanding of that event as when we had seen it in a news report on television. Given the very different nature of those modalities, this is impossible to explain if we do not assume that readers construct a mental representation of the event rather than of the medium that described the event. (Zwaan and Radvansky 1998: 164)

This feature of the situation model framework may help account for how readers comprehend narratives that are narrated from multiple perspectives, or that blend discourses of different types. I will explore this further in my discussion of Atwood's *The Blind Assassin* in Chapter 7.

While the situation model framework formed part of the theoretical context that informed Werth's thinking, it has received limited attention in more recent discussions of Text World Theory. One notable exception to this is a recent discussion by Gibbons (2023). I discuss Gibbons' work in more detail in Chapter 8 of this thesis.

2.3 - Memory

In the preceding sections I discussed how literary comprehension, like comprehension of the world in general, involves comparing new information with existing memory structures so that current inputs can be interpreted in the light of past experiences. In lengthy discourses, however, the role of memory is not limited to the passive retrieval of background knowledge. In order to comprehend novel-length texts, readers must retain and subsequently make use of information they encounter in the opening passages, possibly modifying it in the process. These earlier passages may be read days or even weeks before the final pages. For these reasons, questions of how representations of discourse are stored in and retrieved from memory are crucial to accounting for comprehension processes in long narratives. In this section, I offer a summary of current theories of how human memory is structured (Section 2.3.1), and then introduce the idea of a 'gist representation' of a text (Section 2.3.2).

2.3.1 - The Structure of Human Memory

Cognitive psychologists are largely united in the belief that we cannot talk of human memory as a singular system, but that memory can be divided into different subsystems or processes (Atkinson and Shiffrin 1968; Baddeley 1983, 1992, 1999, 2010; Baddeley and Hitch 1974; Paivio and Kalman 1971; Richardson et al 1996). By the late 1960s several similar models had been suggested, of which that of

Atkinson and Shiffrin (1968) is the most frequently cited. This suggests that distinctions can be drawn between:

- *Sensory buffers*, which briefly retain information from different sensory input systems
- *Short-term memory (STM)*, which holds a finite amount of information for a period of no longer than a few seconds
- *Long-term memory (LTM)*, which is a practically limitless resource in which a subset of information from the STM is stored on a permanent or semi-permanent basis

In early models, STM was imagined as a simple storage device, holding items until needed, and as a 'stepping-stone' to LTM (Just and Carpenter 1992: 122). Early attempts to understand STM involved experiments to measure its capacity, leading to the frequently cited statistic that most people are able to remember seven plus or minus two items (originally demonstrated by Miller 1956, see also Baddeley 1999: 39). The ability to 'chunk' information thus becomes an essential strategy for optimising the potential of STM: it takes fewer slots to store 'thirty' than to store 'three zero', and fewer slots to recall a holistic RESTAURANT script than to remember every action a diner completed during an evening out.

However, the concept of a single STM has since been refined. Baddeley performed a series of experiments in which he demonstrated that subjects could perform combinations of tasks requiring them to retain information in more than one modality at once (Baddeley 1983, 1992, 1999, 2010; Baddeley and Hitch 1974). He subsequently proposed replacing Atkinson and Shiffrin's STM with a more complex system of 'working memory'. In this model, working memory can store both phonological and visio-spatial memory traces, under the control of a central executive which can draw on both resources to perform problem-solving tasks. One such task is of course language comprehension, in which readers must perform local coherence tasks such as matching anaphors to

previously mentioned entities, and relating individual propositions to wider themes within a text (van Dijk and Kintsch 1983; Just and Carpenter 1992).

Baddeley's model has been refined in turn by Just and Carpenter (1992). Instead of treating working memory as a store that can hold a discrete number of elements, Just and Carpenter propose a system in which a finite amount of activation is shared out among different elements (with 'elements' referring to entities including words, propositions, frames, thematic structures and objects in the external world). As a discourse progresses, the activation of new elements, prompted by the discourse itself or by retrieval from long-term memory, means that activation of older elements decreases; a process the authors describe as 'a kind of forgetting by displacement' (Just and Carpenter 1992: 123). This model of comprehension has been expanded further by Van den Broek and others, who offer a 'landscape' model of attention during reading (Van den Broek and Gustafson 1999, Yeari and Van den Broek 2011). The landscape model begins with an assumption that reading involves integrating semantic concepts conveyed in the current reading cycle with concepts remembered from the immediately preceding cycle, concepts conveyed earlier in the text, and background knowledge. It then claims:

[L]imited attentional capacity and access to these sources of activation cause text elements constantly to fluctuate in activation as the reader proceeds through a text. With each reading cycle, new concepts are activated, some old ones are retained, and others are removed from the focus of attention or working memory. [...] By simultaneously considering the activation "peaks" and "valleys" for each concept across reading cycles, one obtains a "landscape" of activations[.] (Van den Broek and Gustafson 1999: 75)

In other words, textual comprehension is seen not as a process where concepts are either active in, or absent from, the working memory, but as a process that depends on clines of attention.

Though the exact nature of working memory is still being debated, the distinction between short-term or working memory and long-term memory is firmly established. Baddeley has demonstrated that when subjects are asked to recall lists of words they have memorised, they are more likely to confuse similar sounding words if tested immediately after rehearsal, but more likely to confuse words with similar meanings if tested after a longer interval (1999: 35). From this he concludes that STM is sensitive to 'surface' characteristics such as sounds, whereas the information stored in LTM depends more on meaning. Results such as these raise the possibility that the 'gist' of a text is not stored in the long-term memory in the same format (for example, as an analog or analytic representation) in which it was experienced during online processing.

2.3.2 - Gist Representations

In Sections 2.2.4 and 2.2.5 I explored the idea that the primary product of textual comprehension is a mental representation of what a discourse is about, rather than a representation of the text's linguistic structure. Closely related to this is the idea that gist representations play a key role in long-term memory. This idea can be traced back to the work of Bartlett (1932), which I described in Section 2.2.2. Bartlett's observations that experimental subjects tended to produce narrative summaries that conformed more closely to common story templates than the texts that prompted them provided early evidence for the role that schemata play in long-term memory. Bartlett's work was also significant for establishing the idea that memory is partly a constructive process. Since then, extensive evidence has been offered to demonstrate that readers do not recall texts word-by-word but instead remember meaning (Bransford and Franks 1974; Elfenbein 2018: 100; Reyna and Brainerd 1995; Reyna and Kiernan 1994; Van den Broek and Gustafson 1999; for a discussion of alternative views see Cook 1994: 66-67).

Elfenbein defines the gist of a narrative as follows:

[G]ist, in a more technical sense [is] the simplified mental representation that the mind retains in the long-term memory. When faced with a complex visual scene, or even a moderately long sentence, the mind does not remember everything it has perceived. Instead, it holds on to a drastically reduced, simplified version, something like a sketch rather than a full representation. (Elfenbein 2018: 13)

Studies have demonstrated that gist representations can vary in detail, on a cline which spans brief summaries to near-verbatim responses, with the level of detail stored in a gist representation varying from reader to reader, and for the same reader on different reading occasions (Reyna and Brainerd 1995). Reyna and Brainerd have formalised their studies of gist memory into fuzzy trace theory; a model which explores the idea that gists can be retained alongside verbatim memories of texts (Brainerd and Reyna 2005; Reyna and Brainerd 1995; Reyna and Kiernan 1994). The parallels between this and van Dijk and Kintsch's textbase and situation model (Section 2.2.4) are clear.

One recent study of readers' memories of fictional texts reveals another potentially important element of gist representations. Elfenbein argues:

When psychologists examine offline products, they typically ask readers to remember what they have read [...] [This] focusses on readers' efforts on retrieving plot or, if they are not reading a story, expository content [...] It is more rewarding to code and analyse memory protocols about what happened in a text than to quantify vaguer, fuzzy memories about how a work made readers feel, what their favourite parts were, which parts were most disagreeable, which details stuck in their minds for reasons not easily explained. Yet historical evidence of real readers suggests that these loose associations form as much a part of reader's long-term gist representations as do event summaries (Elfenbein 2018: 101)

Elfenbein goes as far as to suggest that readers' situation models of a novel may resemble memories of emotional responses more than they do tidy plot summaries (2018: 108). Further evidence of the importance of readers' emotional responses to texts has been offered by empirical work (Groes and Mercer, forthcoming). As Baddeley reminds us, 'what you remember is driven to some extent by your emotional commitment and response to the event' (1999: 89).

2.4 - Discussion

In this chapter I have introduced some key concepts in cognitive linguistics. My primary purpose has been to sketch the theoretical advances that paved the way for Text World Theory, which I describe in more detail in the following chapter. In doing so however, I have also identified some of the key issues and debates that will inform my own arguments in this thesis.

In Section 2.2, I noted how mental spaces and situation models are both theoretical frameworks which account for how humans understand discourse. Both frameworks emphasise that discourse comprehension is primarily a process of creating mental representations of what discourse is about, rather than of remembering the discourse itself. Thus, discourse can be understood as a set of instructions for creating mental representations (Zwaan and Radvansky 1998: 177). Both the mental spaces and the situation models frameworks acknowledge that these mental representations are built from background knowledge as well as from textual prompts. Conceptual categories and schemata are both models which aim to account for how humans store such background knowledge in the mind.

In introducing these frameworks in Section 2.2, I paid only limited attention to the question of whether the mental representations created during discourse processing are iconic or analytic in nature. In my introduction to situation models (Section 2.2.5), I cited van Dijk and Kintsch's account of how a reader's textbase is assembled from 'a list of atomic propositions' (1983: x). This description reflects a more general emphasis on propositional knowledge in the author's accounts of discourse comprehension. However, in my discussion of mental representation in Section 2.1, I noted a wealth of experimental evidence that mental representations can be iconic as well as analytic. I argued that

accounting for experiences of mental imagery - including experiences of emotional states - is important if we are to provide a complete model of narrative comprehension. In Chapter 7 of this thesis, I will discuss possible implications of this for Text World Theory, and argue that consideration of the iconic, analytic or compositional nature of text-world mental representations may be important for understanding how text-world representations are preserved or consolidated in the long-term memory.

In Section 2.3 I introduced theories of how human memory is organised, emphasising the distinction between working and long-term memory, and arguing that a complete theory of narrative comprehension must account for how representations of discourse are stored in both systems. This question will be significant as I explore how readers remember Atwood's fictions, attempting to account not only for how passages prompt readers to create mental representations during moment-by-moment textual processing, but also for how individual passages contribute to evolving gist representations of a text.

Having established this theoretical background, the following chapter introduces Text World Theory in detail.

3. Text World Theory in Context

In this chapter I offer a more detailed introduction to Text World Theory (Gavins 2007; Werth 1999); the primary critical framework I will be adopting in this thesis. I also place it in relation to two other theoretical frameworks. The first of these is the concept of ‘possible worlds’, a notion that emerged in philosophy (Kripke 1963; Lewis 1978) and has since been adopted and adapted by literary critics and stylisticians (Bell 2010; Bell and Ryan 2019; Doležel 1979, 1980, 1998; Eco 1981; Pavel 1975; Ryan 1987, 1991, 1992, 2006, 2017; Semino 1997). The other is the storyworlds model (Herman 2002, 2009; Ryan 2019, 2022; Ryan and Thon 2014). All three of the frameworks I discuss in this chapter draw on the metaphor of a ‘world’ to account for processes of discourse comprehension. However, each uses the term ‘world’ in a different way. I therefore begin this chapter by considering this metaphor in more detail. In Section 3.2, I give a more detailed account of possible worlds theories, which influenced the development of both Text World Theory, discussed in Section 3.3, and the storyworlds framework, discussed in Section 3.4. In Section 3.5, I compare and contrast the three frameworks. Here I introduce the idea that Text World Theory might be expanded to provide a more complete model of discourse comprehension, and offer a series of hypotheses that I will test and refine in subsequent chapters.

3.1 - The Metaphor of a World

The use of the term ‘world’ to describe ‘what is presented to the imagination by a narrative text’ has a long history (Ryan 2019: 62). It also occurs frequently in discussions of texts that take place in non-academic settings, as demonstrated by my own study of online reviews of Atwood’s novels *Surfacing* and *The Blind Assassin*. (Details of this study, including my convention for labelling participant responses, are given in Chapter 5.)

I was so pulled into this strange world if some one tapped me on the shoulder while reading I’d have probably jumped ten feet high. (GRS-40)

Indeed, the novel's world is one in which everything is subject to negotiation and everything is up for sale. (GRTBA-85)

However, the word 'world' has different meanings in different contexts. It is sometimes used in a comprehensive sense to refer to 'all that exists' (Ryan 2019: 63), and sometimes in a more discrete sense to refer to a subset of existing entities, as in 'the world of high finance' or 'the world of the drug addict' (Werth 1995: 49). It is also used in different ways with respect to the concept of 'ontology', defined as the philosophical study of the different ways in which things can exist (Hofweber 2018; see also Gavins 2007: 76). For example, comparing a fictional realm such as 'the world of Macbeth' (Ryan 2019) to the real world involves crossing an ontological boundary and comparing different domains of existence; something that is not the case when comparing the realm of high finance to other areas of human activity.

As I will argue in more detail in the following sections, the 'worlds' invoked by possible worlds theories, by Text World Theory and by the storyworlds framework vary in terms of the qualities of scope and ontological status. For this reason, care must be taken when comparing these frameworks.

3.2 - Possible Worlds

3.2.1 - Preliminaries

The concept of possible worlds has its origin in the work of 17th Century scholar Leibniz, who suggested that 'there is an infinity of possible ways in which to create the world', each of which corresponds to a 'possible world' akin to a 'whole universe' (1965: 333). Leibniz's notion was expanded in the 1960s by proponents of 'modal logic'; a branch of philosophy which discusses the truth values of statements modified by operators of necessity and possibility (such as 'It must be true' or 'It could be the case'). Of particular importance was the work of Kripke (e.g. 1963), who argued that such propositions can

be understood using a type of modal propositional calculus known as a 'model structure'. He suggested that this might be thought of informally as a describing a set of 'possible worlds' in which the truth values of individual propositions may vary, and from which one world can be singled out as the 'real' world. In this view, necessary statements are statements which are true in every possible world, and possible statements are those which are true in at least one possible world. (For accessible summaries of Kripke's work see Pavel 1975; Ryan 1991, 1992; Semino 1997.)

In the late 1970s, philosophers (such as Lewis 1978) and literary theorists (such as Doležel 1979, 1980, 1998; Eco 1981; Pavel 1975) began using Kripke's notion of possible worlds to explore the semantics of literary texts. Kripke's work suggested a new perspective on an ongoing debate about the truth values of statements in and about literary works (Doležel 1979; Soames 2010). Literary critics had disagreed over whether it was possible to regard a statement such as 'Sherlock Holmes lives in 221B Baker Street' as correct. A solution to this dilemma was offered by Lewis (1978), who argued that statements about fictional entities should be treated as if prefixed with the qualifier 'In-such-and-such-a-fiction...'. This effectively shifts the sentence from describing the actual world to describing a possible world in which the statement is told not as fiction but as known fact. Such a qualifier is known as an 'intentional operator' (Doležel, 1979), and has important consequences. As Lewis (1978: 39) emphasises, we cannot think of fiction as composed of abstract sentences, but should regard it as comprising statements made by a storyteller on a particular occasion. This point is essential to our understanding of how we comprehend fictional texts. Readers form distinct representations of different possible worlds, and are able to keep track of which representations to update when processing new information, based on their understanding of the conditions of utterance. Significantly, this implies that readers do not process the sentences of literary texts in isolation, but draw on their understanding of the discourse context as part of their comprehension process.

3.2.2 - Ryan's Possible Worlds Theory

Ryan's monograph *Possible Worlds, Artificial Intelligence and Narrative Theory* (1991) represents a milestone in the application of key ideas from possible worlds theories to literary criticism. Firstly, she provides a typology for describing different kinds of fictional and non-fictional worlds, defining the following entities (24-25):

- *Actual World* (AW) - The real world, in which the author and reader reside
- *Textual Actual World* (TAW) - The 'centre' of the referential universe created by the text
- *Textual Referential World* (TRW) - An entity external to the TAW. The TAW is offered as an accurate representation of the TRW.

One feature of this typology is significant to this study. From a logical perspective, we understand that there is a potential for the TAW and the TRW to differ. However, Ryan and subsequent authors have suggested that the TRW is normally 'rendered redundant', because 'in the textual universe, we can never know whether the descriptions of a Textual Reference World verify or contradict its actual status because it does not actually exist' (Bell 2010: 24). Significantly though, such authors grant that this distinction becomes important in the case of unreliable narration (Booth 1961; Phelan 2005, 2017; Rabinowitz 1977 and Section 6.1.2 of this thesis). I will build on this point as I develop the arguments in this thesis.

Reviewing these ideas with respect to the concepts of scope and ontological completeness which I highlighted in Section 3.1, it is important to note that the 'worlds' this typology describes are both comprehensive and ontologically discrete. In other words, there is only one actual world, which contains everything that exists at the reader's ontological level of existence. Recentring from the AW to the TAW of a fictional text involves crossing an ontological boundary into another comprehensive world, which corresponds to the actual world experienced by the characters in the fiction, and contains everything that exists at this ontological level.

Ryan uses the notion of 'recentering' to describe the process that readers undergo when they listen to or read a story. Recentering involves cognitive processes similar to those involved in interpreting instances of 'deixis'; elements of language (such as the words 'here' and 'now') that cannot be understood in the absence of knowledge about the conditions of their utterance (Semino 1997: 31-51; Stockwell 2002: 41-57; Tsur 2003). Listeners in a face-to-face conversation interpret the word 'here' not with reference to their own physical location but to that of the speaker. Likewise, readers of fictional texts engage in a 'fictional pact' and accept the author's invitation to 'become citizens of the recentred system [and] step into the role of the narrator [...] thus shifting their attention from AW to TAW/TRW' (Ryan 1991: 26). Thus Ryan's notion of recentring tallies with Gerrig's (1993: 2) account of readers employing a metaphor of 'being transported' by a narrative. (For a fuller account of the connections between interpreting deictic language and comprehending narrative fiction see Galbraith 1994).

Another significant feature of Ryan's possible worlds theory is her introduction of the metaphor of a 'textual universe' to describe the semantic domain of a narrative text (1991: 4). Earlier literary theorists such as Todorov had argued that the unrealised dreams, plans and fears of characters were at least as important to the 'plot' of a narrative as the narrated events, but were not accounted for in traditional narratological typologies (1969B, for a summary see Ryan 1991: 3). Ryan suggests that the concept of possible worlds can be used to remedy this, and proposes that the TAW of a text is surrounded by worlds representing the mental activities of its characters. Again, she offers a typology for classifying the different worlds that comprise the narrative universe projected by a text. For example, in addition to the TAW, a text may project 'obligation-worlds' in which 'all of the obligations [of a particular character] have been fulfilled and none of the interdictions transgressed' (1991: 116), or 'wish-worlds' in which 'all the propositions labelled good [by a particular character] are true' (1991: 118). This presents the literary critic with strategies for textual analysis, as exemplified by Semino's (2003) reading of Hemmingway's 'A Very Short Story', in which she concludes that the

text is distinguished by conflicts between characters' wishes, and by the fact that the resulting wish-worlds are frustrated by the real events of the text.

In addition to classifying the worlds projected by fictional texts, Ryan also provides a typology for specifying the ways in which two possible worlds differ from each other. Referring to Kripke's modal logic, she suggests that 'possibility is synonymous with accessibility', and that 'a world is possible in a system of reality if it is accessible from the world at the centre of the system' (1991: 31). She then clarifies this by noting that in philosophical terms, 'a world is possible if it satisfies the logical laws of noncontradiction and of excluded middle' (1991: 3). Thus, in philosophical terms, states of affairs can be conceived as possible worlds if they contain no logical contradictions, and not otherwise. However, Ryan notes that this definition is too rigid for describing literary texts, as some texts, such as surrealist poems or postmodernist fictions, do indeed describe such logically impossible scenarios. Instead, she proposes a 'wider range of accessibility relations [some of which] will be looser than the logical laws, others more constrained' (1991: 32). Ryan therefore proposes a number of different 'accessibility relations'. Thus we can distinguish 'Logical compatibility', in which 'TAW is accessible from AW if both respect the logical principles of non-contradiction and the excluded middle', from 'Physical compatibility', in which 'TAW is accessible from AW if they share natural laws' (1991: 33; for a full list of Ryan's accessibility relations see 1991: 32-33). Ryan goes on to suggest that texts of the same genre often uphold or violate the same accessibility relations. For example, a characteristic of many fairy stories is that they violate the 'Identity of taxonomy' relation by describing fictional creatures such as fairies, elves or animals that can talk, which don't exist in the actual world.

Another important concept introduced in Ryan's monograph is the 'principle of minimal departure' (1991: 48-60). Here Ryan makes a clear break from the concept of possible worlds used in modal logic, in order to explain a phenomenon that occurs commonly in narrative comprehension. She argues that readers make assumptions about fictional or hypothetical worlds by drawing on what they know about the real world, unless explicitly instructed not to do so by the text:

[t]he principle of minimal departure - states that we reconstrue the central world of a textual universe in the same way we reconstrue the alternate possible worlds of nonfactual statements: as conforming as far as possible to our representation of AW. We will project upon these worlds everything we know about reality, and we will make only the adjustments dictated by the text. When someone says "If horses had wings they would be able to fly," we reconstrue an animal presenting all the properties of real horses, except for the presence of wings and the ability to fly. (Ryan 1991: 51)

Given this description, it is possible to identify parallels between Ryan's principle of minimal departure, and Fauconnier's description of the 'optimisation' of mental spaces (see section 2.2.4). Just as discourse participants map the structure of a 'parent' mental space to a 'child' mental space in the absence of contradiction (Fauconnier 1997: 43), so Ryan suggests that readers map their knowledge about the real world into the TAW of a text, unless information in the text explicitly discourages them from doing so.

This notion, intuitive as it may seem, has attracted a degree of criticism. Nothing in Ryan's formulation explains why we draw on some facts about the world but not on others when reading genres such as fairy tales. Semino makes this point by suggesting that in Ryan's model, 'one would have to conclude that the world of "Jabberwocky" contains computers', because nothing in Lewis Carroll's text contradicts this possibility (1993: 147). Difficulties such as this reflect the fact that Ryan's possible worlds model is grounded in logic, rather than in theories of human cognition. Nonetheless, the principle of minimal departure does appear to reflect some important part of the comprehension process, and has been adopted by later critical frameworks, as I will discuss later in this chapter.

Ryan makes two further claims which are relevant to this study. Firstly, she suggests that narrative conflict can be characterised as a mismatch between the actual world of a text, and the propositional worlds created by characters' goals, wishes and obligations (1991: 124-147). This becomes particularly relevant when analysing novels which prioritise psychological drama over

dramatic events. Secondly, Ryan offers an intriguing theory of ‘tellability’, in which she argues that the most memorable stories are those whose narrative universes contain the most diverse range of possible worlds (1991: 148-174).

3.2.3 - Advantages and Limitations of Ryan’s Possible Worlds Theory

The application of concepts from possible worlds theories to literary criticism has led to new methodologies for textual analysis. By providing a framework to distinguish states of affairs in the TAW of a text from states of affairs in possible worlds representing the desires and beliefs of specific characters, it has allowed critics to describe, in precise and empirical terms, the importance of characters’ inner lives to narratological structures. However, while Ryan’s possible worlds theory (as outlined in Ryan 1991) represents a significant departure from earlier theories grounded in modal logic, it is not - and makes no claims to be - a cognitive account of comprehension. For this reason, it is normal to speak of possible worlds as constructs that are projected by a text, rather than as constructs that are created by listeners or readers.

Semino’s criticisms of Ryan’s principle of minimal departure reflect the fact that Ryan’s model does not provide a rigorous account of the ways in which discourse participants draw on background knowledge when comprehending narratives. Semino has also noted that the notion of an ‘actual world’ becomes problematic whenever we move away from logic and begin discussing cultural phenomena, where ‘[w]hat is taken as “actual” is not an absolute notion, but is dependent on historical, cultural and ideological factors’ (1997: 83, see also 1993). This means that any attempt to use possible worlds approaches to account for real reading experiences will quickly run into problems. To build on Ryan’s example above, it is clear that different readers will conceptualise ‘winged horses’ differently, depending on their different experiences of real-world horses. Nonetheless, the framework still provides useful ways of describing narrative structures. For example, Lugea (2013) has used Ryan’s model to compare the TAW and dream worlds portrayed in the film *Inception* (2010), and argued that Ryan’s typology of accessibility relations can be used to explore inconsistencies between

these worlds that are spotted by fans. Mansworth (2022) has explored the different possible worlds projected by Janice Galloway's novel *The Trick is to Keep Breathing* (1989), and suggested that the text's failure to describe possible worlds that exist as positive alternatives to the TAW is a textual feature that contributes to the sense of the protagonist's depression. Both of these discussions reveal ways in which the concept of possible worlds can be a valuable tool for stylistic analysis.

3.3 - Text World Theory

In this section I introduce Text World Theory; the primary theoretical approach that I draw upon in this thesis. Two reasons underpin my reason for choosing this framework. Firstly, in contrast with Ryan's possible worlds approach described in Section 3.2, Text World Theory has been formulated as a cognitive account of discourse processing, and draws explicitly on previous cognitive linguistic theories. Secondly, as I explore in more detail in Chapter 5, Atwood is a novelist who makes frequent use of innovative narrative structures in her fiction. Accounting for this aspect of her style requires a theoretical approach which allows analysts to describe effects which unfold in units of discourse longer than the sentence. Text World Theory, as a linguistic framework which attempts to account for entire discourse encounters, is therefore well-placed to account for readings of lengthy passages of prose fiction.

3.3.1 - Preliminaries

Text World Theory (Gavins 2007; Werth 1999) was developed by Werth in the late 1980s and early 1990s, and offered as a 'Unified Field Theory' of language and cognition (1999: ix). The most comprehensive account of Werth's thinking was published after his death (1999). The theory has since been tested and refined, most notably by Gavins (2007). Both authors describe Text World Theory's genesis in cognitive psychology and cognitive linguistics, and both acknowledge a debt to the possible worlds theories described in the previous section. However Text World Theory and possible worlds theories differ in significant ways. Crucially, Text World Theory aims to account for the mental

representations that readers create while reading or speaking. While it is often used as a tool for literary criticism, it treats face-to-face spoken communication as the prototypical discourse scenario, and aims to account for all instances of written or spoken linguistic communication. It has so far been used to analyse a wide range of linguistic scenarios; for example everyday conversation (Gavins 2007: 18-25), oral narratives (Van der Bom 2016), prose fiction (Gavins 2003, 2007, 2010, 2013; Lahey 2016, 2019; Neurohr 2019; Norledge 2019, 2021, 2022; Nuttall 2014, 2017; Stockwell 2002, 2019; Whiteley 2010, 2011, 2016), poetry (Gavins 2007, 2012, 2014, 2016, 2020; Gavins and Stockwell 2012; Giovanelli 2013; Lahey 2004, 2006, 2007; McLoughlin 2013, 2014, 2019; Semino 1997; Stockwell 2002, 2009), popular music (Filardo-Llamas 2019; Gavins 2007: 73-5), drama (Cruickshank and Lahey 2010; Gibbons 2016; Lugea 2016), television comedy (Gibbons and Whiteley 2021), sports commentary (Gavins 2007: 64-71), political discussion (Browse 2016; Gavins 2007: 121-4), classroom teaching (Giovanelli 2010, 2019; Giovanelli and Mason 2015), creative writing pedagogy (Scott 2014, 2016), reading group discussions (Canning 2017; Whiteley 2010, 2011), online discussion forums (Kuijpers 2022), descriptions of visual images (Gavin forthcoming) and comments in visitor books (Gavins et al 2021).

Central to Text World Theory is the notion that humans understand abstract concepts by drawing on more basic embodied experiences; in particular, their experience of existing in physical space (Werth 1999: 7; see also Gavins 2007: 48; for broader cognitive linguistic contexts see Lakoff and Johnson 1980a, 1980b; Langacker 2008). According to the framework, humans comprehend all texts by constructing mental representations which draw on their spatial understanding. For Kripke (1963), possible worlds are an informal way of thinking about logical constructs. For Ryan, possible worlds are a metaphor for describing the semantic domain of a text (1991: 3). By contrast, text-worlds are flexible mental constructs that help us conceptualise any situation we can describe using spoken or written language.

Text World Theory builds on previous cognitive linguistic ideas, drawing on frameworks including schemata and similar knowledge structures (described in Section 2.2.2), mental spaces

(described Section 2.2.4), mental models (Johnson-Laird 1980, 1983, 2006, 2010) and Conceptual Metaphor Theory (described in Section 2.2.3). However, Werth also made a radical departure from earlier thinking in his early formulations of the approach. As I noted in my discussion of Fauconnier's mental spaces model in Section 2.2.2, much preceding linguistic theory had focussed on isolated texts, and often on single sentences, as the traditional object of study. Werth emphasises that language is always used in particular situations, and argues that linguists need to study not only text but also discourse; 'an actually occurring piece of language whose dimensions are determined by the situation (including, crucially, the participants in it)' (1999: 3). This means taking a rigorous approach to studying the context in which an utterance is made, including the immediate situation surrounding the discourse participants and the background knowledge they bring with them. Werth conceded that such context can be vast; potentially 'as much as the whole universe' (1999: 79), but argued that one cannot ignore its importance simply because it presents difficulties. He therefore attempted to find some rigorous but manageable way to consider its effects, and to this end proposed a 'principle of text-drivenness':

[T]he text is dependent upon its surrounding context for much of its interpretation. But this is in fact an interdependency; without its linguistic heart, a discourse would be undirected and pointless [...] the text not only controls a great proportion of the syntactic and referential processes which take place within it [but] also determines which areas of knowledge - even pragmatic knowledge - have to be evoked in order to understand it
(Werth 1999: 150-151)

A full account of Werth's treatment of background knowledge is beyond the scope of this discussion, but one point in particular is salient. Werth distinguishes two 'modes' of knowledge: 'propositional knowledge', 'expressing facts of various kinds', and 'functional knowledge' representing physical or conceptual acts (1999: 101-2). While this is not an exact parallel of the distinction between analog and

analytic mental images discussed in Section 2.1, it is clear that Werth acknowledges the possibility that different kinds of mental representation play a role in discourse comprehension.

Text World Theory, therefore, is built on an assumption that background knowledge shapes discourse comprehension. Just as people interpret moment-by-moment sensory experiences using knowledge structures such as categories and schemata (as described in Chapter 2), so they comprehend instances of discourse by combining linguistic prompts and perceptions of the environment with inferences based on their background knowledge (Gavins 2007 21-23). One consequence of this is that different participants may take the same text and construct contrasting text-worlds by applying different schemata. Gavins illustrates this process in everyday conversation when she demonstrates how cultural differences between Britons and Americans can lead to confusion (2007: 19-25). The same process can lead to readers arriving at differing interpretations of written texts, particularly when author and reader do not share the same cultural background. Werth's acknowledgement that such processes play a crucial role in discourse processing represents an important departure from theories of linguistics that focussed primarily on accounting for the comprehension of isolated sentences.

3.3.2 - Discourse-Worlds and Text-Worlds

In Text World Theory, communication happens in a specific context - the 'discourse-world' - and involves participants working together to construct a conceptual representation of the topic of the discourse - the 'text-world'. Whiteley elaborates:

[B]oth the discourse-world and text-world are constructs resulting from human cognitive processes - but the discourse-world is based on resources of direct perception [...] The text-world, on the other hand, is a construct formed from resources of memory and imagination (Whiteley 2010: 29)

However, because context is critical in Text World Theory, this distinction can be clarified. The discourse-world contains not only what participants see and hear, but also what they can work out from their perceptions. Werth illustrates this with an intuitive example: if participants can perceive bark and leaves, their discourse-world representation is likely to contain a tree, even though the participants may not be able to see a tree in its entirety (1999: 83). By the same logic, the discourse-world can potentially contain ‘all the personal and cultural knowledge those participants bring’ (Gavins 2007: 10), moderated of course by the principle of text-drivenness.

In face-to-face conversation the discourse-world contains at least two discourse participants, and corresponds to the here and now of the act of communication. In written fiction, author and reader do not usually exist in the same place at the same time, and the discourse-world is described as ‘split’ (Gavins 2007: 26). In such scenarios, information gleaned from the discourse environment usually becomes less important, leaving the text as the primary source of information from which knowledge is incremented. However, as I explore in 3.3.5, readers of fictional texts can adopt cognitive strategies which help them process the text as if face-to-face communication was taking place.

As discourse progresses, discourse participants create ‘text-worlds’; mental representations of what the discourse is about. Text-worlds are constructed through discourse via ‘world-building elements’ (Gavins 2007: 38-44; Werth 1995: 57, 1999: 180-2), which define the deictic parameters of the world, populate it with objects and people, and define the relationships between them. In this sense, Text World Theory has clear parallels with both the mental spaces framework and the situation models framework which I discussed in the previous chapter.

We can illustrate the world-building potential of fictional discourse by considering the opening line of Atwood’s novel *The Blind Assassin*:

Ten days after the war ended, my sister Laura drove a car off a bridge. (TBA: 1)

This sentence prompts the reader to create a mental representation containing a character Laura, a car and a bridge. The use of the past tense locates the scene at some point in time prior to the narrator's utterance. The reader is also told that the event happened 'Ten days after the war ended', and this adverbial phrase situates Laura's action more precisely in time. Encountering this, readers may draw upon their background knowledge of technological and military history to place the scene at some point in the Twentieth Century. They may also rely upon a 'driving' schema to fill in other details, such as the fact that if Laura is driving, she is likely to be an adult when the incident took place. However, different readers will draw on different prior experiences and background knowledge when constructing text-worlds, and text-worlds will therefore vary from reader to reader depending on the particular inferences they make. As in Ryan's possible worlds theory, such inferences are governed by the principle of minimal departure, which Text World Theory incorporates (Gavins 2007: 12).

Text-worlds can in principle be 'as richly detailed as the discourse-worlds from which they spring' (Gavins 2010: 10). Moreover, participants do not experience them passively, but instead process the spatial and temporal information as if they occupied the *HERE* and *NOW* defined by the world. This process is described by cognitive psychologists using the term 'projection', and explains why readers often speak of feeling immersed in a text (Gavins 2007: 40, see also Duchan et al 1995). There is a parallel here with Ryan's notion of recentering, described in Section 3.2. However, Whiteley suggests that 'psychological projection' can range from a simple mapping of a discourse-world participant's 'embodied sense of space and location' to 'the imaginative reconstruction of other psychological aspects of that entity's perspective, including their worldview, attitudes, emotions [and] goals' (Whiteley 2011: 27, see also Martinez 2018; Stradling 2019; Stockwell 2009a).

Once the initial parameters of a world are established, worlds can be updated by 'function-advancing propositions' containing verbs. Often, though not always, function-advancing propositions are used to describe how text-worlds change over time. Frequently, worlds advance as a result of deliberate physical actions by conscious actors, though they can also progress as a result of other kinds of processes. (For a full description and typology of processes, derived from Halliday's Systemic

Functional Linguistics (Halliday 1985) see Gavins 2007: 53-72). It is important to note that the presence of these different processes depends both on *what* the discourse describes, and on *how* the discourse participants choose to describe it. In the opening line of *The Blind Assassin*, for example, it is significant that Atwood chooses the phrase 'Laura drove a car off a bridge' rather than possible alternatives such as 'Laura's car fell from a bridge'. The clause 'Laura drove a car off a bridge' is described in Systemic Functional Linguistic terms as a 'material intention process', and is distinguished by the fact that it portrays a conscious actor responsible for an action. By contrast, 'Laura's car fell from a bridge' is a 'material supervision process', which does not describe a conscious act. Comparing such linguistic alternatives provides an opportunity for the analyst, as Gavins demonstrates when she examines different accounts of the same football match (2007: 54) and shows how the attribution of different kinds of processes to different individuals or non-sentient objects can affect a listener or reader's perception of the relative performance of the teams.

While all discourses prompt participants to create at least one text-world, most require participants to conceptualise events that happen across a range of different spatial and temporal locations. This occurs commonly in fictional narratives, as the action progresses from scene to scene, and when the linear progression of narrated events is interrupted by 'analepsis' (flashbacks) or 'prolepsis' (flashforwards) (Genette 1980). Each new scene - or more precisely, each switch in spatial or temporal parameter - results in the creation of a new text-world mental representation. Werth refers to such subsequent worlds as 'sub-worlds' (Werth 1999: 210-258); a term he also uses to describe worlds representing characters' attitudes and beliefs. However, Gavins notes that the phrase 'sub-world' implies that such worlds have a subordinate status, which she argues is a potentially confusing way of describing the text-worlds of narrative fictions:

[R]arely in literary fiction do the deictic parameters initially established in the opening lines of a text remain invariable for its duration. More commonly, in fact, countless numbers of deictic alternations take place throughout the course of a fictional narrative

and, once departed from, the initial [matrix] text-world is often never returned to again and may figure little in the reader's overall interpretation of the text. (Gavins 2005: 82)

Gavins departs from Werth by referring to text-worlds created in this way as 'world-switches'. (In this thesis I follow Gavins' terminology, which is adapted from Emmott's (1997) concept of a 'frame switch'). World-switches are prompted by specific linguistic cues such as spatial or temporal adverbial phrases ('tomorrow', 'on the other side of the city'). They are also triggered by instances of direct speech, which is interpreted with respect to the quoted speaker's deictic 'origo' (Duchan et al 1995) rather than that of the quoting speaker or narrator.

Often, the same character will appear in more than one text-world, or at more than one conceptual level of discourse. This happens in face-to-face conversation, for example, when a storyteller may be present in both the discourse-world, and in the text-world they create. The ability to keep track of these different versions of the same person - and to understand that each may have different properties and beliefs - is crucial to narrative comprehension. The term 'enactor' is used to distinguish two or more versions of the same character who appear in different text-worlds; for example, worlds separated by a world-switch prompted by a flashback, in which older and younger versions of the same character appear (Emmott 1997, Gavins 2007: 41).

As Gavins notes when she performs an analysis of the opening paragraphs of Alexander McCall Smith's *The No. 1 Ladies Detective Agency*, even short passages of text can require a reader or listener to switch between several different text-worlds; a process she suggests is done with minimal cognitive effort (1997: 49). Describing the frequency with which a text prompts such world-switches, and exploring the nature of such switches - for example, whether they represent spatial or temporal changes - is one strategy by which stylisticians can make connections between an author's linguistic choices and a reader's interpretation. (For examples of how such 'edgework' can account for particular readings of literary texts, see Stockwell 2009a).

3.3.3 - Ontological Levels and Modal-Worlds

When a text prompts a world-switch as a result of a change in deictic parameters, the two resulting text-worlds exist at the same ontological level. This represents a contrast with the discrete possible worlds that comprise Ryan's 'textual universe' (see Section 3.2.2). However, Text World Theory also provides a framework for discussing states of affairs at different ontological levels.

A difference in ontological status always exists between entities in a discourse-world and entities in a text-world, even when the text-world is representing real-world occurrences (Gavins 2007: 76). Differences in ontological status can also exist between the different text-worlds prompted by a discourse. This can happen as a result of modal linguistic features of a text which convey the attitude of a speaker or character. Simpson (1993) defines such features as follows:

[There are] a variety of grammatical means for conveying modal commitment, amongst which are included modal auxiliaries, modal adverbs (or sentence adverbs), evaluative adjectives and adverbs, generic sentences and verbs of knowledge, prediction and evaluation. (Simpson 1993: 43)

In Gavins' (2007) formulation of Text World Theory, the worlds that result from such modal features are known as 'modal-worlds'. Werth had included worlds prompted by characters' attitudes and worlds prompted by epistemic modalised propositions in a category of 'sub-worlds' (1999: 216), which also included worlds prompted by deictic shifts. Another advantage of Gavins' reworking is that it differentiates world-switches, which remain at the same ontological status as the worlds that give rise to them, and modal-worlds which have a different ontological status.

In his study of point of view in language, Simpson suggests that it is important not just to recognise the presence of modality, but also to identify modality of different types. He introduces a modal grammar of narrative fiction, in which he specifies four different kinds of modality (while noting

that overlaps exist between some categories, and that perception modality is a sub-category of epistemic modality):

- Deontic modality - Conveys attitudes of obligation, duty and commitment
- Boulomaic modality - Conveys attitudes of desire
- Epistemic modality - Conveys attitudes of knowledge and belief, and cognition
- Perception modality - Conveys experiences of perception

(Simpson 1993: 47)

Gavins (2005, 2007) draws on this schema to expand her typology of text-worlds. For example, when a text describes a state of affairs desired by a particular character, a listener or reader conceptualises this within a 'boulomaic modal-world'. Building on the notion that text-world mental representations draw on spatial understanding, Gavins suggests that modal-worlds are conceived of as existing at different distances from their parent world, depending on the strength of the modal commitment (2007: 120-136). For example, a likely modal-world is conceived of as being closer to the world that gave rise to it than an unlikely one.

It is generally accepted that new modal-worlds are triggered by specific linguistic cues. Therefore the configuration of worlds prompted by a text (comprising the initial text-world, any subsequent world-shifts, and any subsequent modal-worlds) is something that can be described without reference to particular responses from individual readers or listeners. This structure is often mapped using a text-world diagram (an example of which can be seen on Page 183 of this thesis). Gavins refers to this configuration of worlds as the 'conceptual structure' of a text (for example 2007: 40). I will be using this term frequently in the analyses which follow.

When Text World Theory is used as a tool of stylistic analysis, analysts frequently relate details of a text's conceptual structure to particular readings. This strategy is exemplified by Gavins' study of

the language of absurd fiction, in which she suggests that the use of linguistic triggers associated with epistemic and perception modality is a key feature of the genre:

It is now clear that the modal texture of a literary fiction plays an important role in the communication of unstable or unreliable narrative perspectives in absurd fiction. In particular, we have seen across several chapters how negatively shaded modality, in Simpson's terms (1993), is especially instrumental in the creation of fictional minds that are alienated, bewildered and erratic. This type of modality is often closely associated with the creation of multiple hypothetical modal-worlds, embedded within the main narrative, through which a character's paranoia and confusion are frequently played out (Gavins 2013: 132)

In Chapter 5, I pay close attention to another example of such analysis, when I discuss Nuttall's (2014) reading of Atwood's *The Handmaid's Tale*, in which she explores how the narrator's testimony prompts contrasting modal-worlds in which she imagines mutually exclusive fates for her husband. This, she argues, prevents readers from resolving the narrative into a coherent whole. Nuttall's analysis, like Gavins', demonstrates the potential that Text World Theory offers for making connections between an author's linguistic choices and interpretive possibilities.

3.3.3.1 - Initial Text-worlds and Matrix Text-worlds: A Note on Terminology

Advances in Text World Theory, which often involve the development of previously defined concepts or the introduction of new terminology, inevitably result in the same terms being used in slightly different senses in different publications. For this reason, it is worth introducing a few of the different terms that are sometimes used in text-world analyses, and clarifying how I will be using them in this thesis.

The term 'initial text-world' is used by Gavins (2007) to describe the first text-world readers conceptualise when they process a discourse. Often in heterodiegetic fictional narratives, the initial text-world is instrumental in constructing the fictional world projected by the text, as Gavins demonstrates when she analyses the opening lines of Alexander McCall Smith's *The No. 1 Ladies Detective Agency*:

Like the openings of many realist novels, this part of the text functions as an introduction to the text-world of the story, providing a detailed description of the protagonist and her surroundings. (Gavins 2007: 45).

The term 'text-world level' is also used frequently by analysts (for example Gavins 2007: 134, 2016: 445; Lahey 2014: 290; McLoughlin 2013: 231; Whiteley 2010: 186). It has its genesis in Werth's original description of a distinction between 'discourse worlds, text worlds and sub-worlds' (1999: 68), leading to the claim that 'Text World Theory operates at three levels' (McLoughlin 2014: 230). As noted above however, Werth's original tripartite distinction has been refactored by Gavins (2001, 2005), who has redefined Werth's 'deictic sub-worlds' as world-switches resulting in new text-worlds at the same ontological level as the initial text-world. Thus, in Gavins' formulation, which is now widely accepted, (2007, and outlined in more detail above), the three levels correspond to discourse-worlds, worlds at the text-world level and modal-worlds.

For many prototypical narratives, this distinction is clear cut. It is, however, worth exploring how this distinction holds for examples of less prototypical narratives. Many complex discourses can prompt conceptual structures with more than three ontological levels. This is true in cases where modal-worlds are recursively embedded, as happens with statements of the 'John believes that Jane believes...' type. In such cases, modal-worlds encapsulating John's own beliefs have a different ontological status to modal-worlds encapsulating the beliefs that John attributes to Jane. (I discuss specific instances of this phenomenon in my discussion of *The Blind Assassin* in Chapter 7.) In such

cases though, there remains a clear distinction between worlds with the same ontological status as the initial text-world of the discourse, and worlds which are framed by one or more modal qualifications.

Another case in which discourses can create worlds at multiple ontological levels is when one narrative frames another. This happens, for example, when a fictional character embarks on their own act of narration. Again, *The Blind Assassin* provides an example of this phenomenon, by asking readers to conceptualise a novel-within-a-novel. In this embedded text, a further embedded narrative is created when the character referred to as 'he' begins telling a story to the character referred to as 'she'. This storytelling act is triggered by an act of free direct speech (which Atwood chooses not to mark with quotation marks):

On the planet of - let's see. Not Saturn, it's too close. On the Planet Zircon, located in another dimension of space, there's a rubble-strewn plain. (TBA: 10)

Comprehending this passage involves the reader conceptualising distinct text-worlds. The initial text-world (first established earlier in the chapter) contains enactors of the unnamed 'he' and 'she', in which 'he' is speaking. 'He' subsequently creates a discrete discourse, introducing his own initial text-world, with a location corresponding to 'On the planet Zircon' and populated by the world-building element 'a rubble-strewn plain'. This world is created from the world in which 'he' and 'she' reside. Unlike other world-switches triggered by direct speech however, it does not reside at the same ontological level as the initial text-world, and unlike modal-worlds its modal status is not signalled linguistically. Instead it invites readers of *The Blind Assassin* - as it invites 'she' - to create an ontologically distinct initial text-world, which has the potential to give rise to its own subsidiary modal-worlds. In other words, care is needed when discussing examples such as this one, to distinguish the initial text-world prompted by the novel, and the initial text-world prompted by the discrete discourse within the novel.

In most examples of embedded narration, texts invite readers to conceptualise an initial text-world, and then a second initial text-world created by an act of narration within the first. Galbraith

describes such instances - which require users to make a shift of deictic origo - as PUSHes. She distinguishes these from POPs in which readers emerge to a 'more basic-ontological-level deictic plane' (1995: 47). Examples which involve the comprehension of a POP without a prior PUSH are less common, but do occur. One such occurs in Lewis Carroll's *Alice in Wonderland* (1856), when the heterodiegetic narrator invites the reader to increment a talking rabbit into the initial text-world prompted by the opening paragraphs of the novel, then reveals at the very end of the text that this event occurs within a dream which takes place in an ontologically prior world. In such cases, if we accept that the initial text-world is defined as the first world constructed by a text, we need some way of describing worlds which exist at a more basic ontological level than the initial text-world does.

In other words, while the notion that Text World Theory operates at three levels is adequate for most prototypical narratives, care must be taken over the use of the phrase 'the text-world level' in narratives with embedded structures. In this thesis, I use the term 'initial text-world' to refer to the first world created by a discourse, regardless of its ultimate ontological status, acknowledging that the presence of embedded discourses can result in a single text prompting distinct initial text-worlds. Where analysis involves the discussion of embedded discourses, I endeavour not to use the term 'initial text-world' without being explicit about which discourse I am referring to. Though the term 'text-world level' is unambiguous when the relevant initial text-world is explicitly specified, I avoid using it to avoid creating a potentially misleading impression that worlds with the same ontological status as an initial text-world are necessarily the most ontologically basic worlds created by a text.

Another term that is commonly used by analysts is 'matrix text-world'. In Gavins' formulation of Text World Theory, a matrix text-world is any world which gives rise to another (whether or not it has a different ontological status). It is therefore analogous to the concept of a 'parent space' in Fauconnier's mental spaces framework. However, the term matrix text-world is frequently used in conjunction with the definite article, in a manner which implies that each discourse has a single matrix text-world.

[deictic sub-worlds] mark a movement in spatial or temporal terms from the deictic parameters of the matrix world (Giovannelli 2013: 67, my emphasis)

In such cases, matrix text-worlds may be spoken of as if they are equivalent to the initial text-world of a discourse, or to the most ontologically basic world the discourse prompts. In prototypical heterodiegetic narratives, which do not involve POPs that have not been preceded by PUSHes, the initial text-world is frequently the most ontologically prior world encountered, rendering this distinction moot. However, this need not always be the case. In his analysis of an extract from *Words of Radiance* by Brandon Sanderson, Neurohr implies the existence of single matrix text-world, but suggests this is not revealed until the end of the passage:

Of particular significance is the fact that while Text World 1 could be considered the “matrix text-world” in the Text World Theory analysis, it is in fact only completed by the very last step of the reading process (Neurohr 2019: 51, my emphasis)

In this thesis, I avoid using the term ‘matrix text-world’ to avoid potential confusion with its use in other contexts. Where I wish to refer to a world which gives rise to another world, I will borrow from Fauconnier’s (1985, 1997) notion of a ‘parent space’ and use the term ‘parent world’ (and, reciprocally, ‘child world’), acknowledging that parent worlds can themselves have parent worlds of their own. I also note here that Neurohr’s example - and the *Alice in Wonderland* example above - illustrate that there are times when it is necessary to distinguish the initial text-world of a discourse from ontologically prior worlds. I return to this question, and propose a solution, in Chapter 8 of this thesis.

3.3.4 - Participant-Accessible and Enactor-Accessible Worlds

The crossing of ontological boundaries has implications for how readers react to the worlds they create. When a discourse-world participant makes a claim, the listener or reader can assess the

reliability of the speaker or writer because they exist in the same ontological domain. In a face-to-face discourse, the listener can question the speaker directly. In a split-discourse world, the listener or reader may not be able to communicate directly with the speaker or writer, but can still potentially verify the truth value of any claim made. By contrast, when a claim is made by an enactor who exists in a text-world but not in the discourse-world, the listener or reader is not able to judge their reliability directly. For this reason, Text World Theory distinguishes between 'participant-accessible' and 'enactor-accessible' text-worlds (Gavins 2007: 77; Werth 1995, 1999: 214).

Distinguishing such worlds provides another strategy for analysts, and this distinction can explain why readers react differently to different parts of a text. Gavins illustrates this by identifying the text-worlds generated by an excerpt from a parenting manual. She contrasts the participant-accessible worlds generated by the author with the enactor-accessible worlds generated when the author quotes anecdotes from other parents, and suggests that the resulting difference in ontological status explains why most readers find the author's testimony more reliable than that of the second-hand reports (2007: 74-80).

3.3.5 - Fictional Narration

Reading a novel provides a less prototypical experience of discourse than participating in a face-to-face conversation. Firstly, the discourse-world is 'split', with author and reader separated in time and space. Secondly, the narrator of a novel is a textual construction, and has no counterpart in the discourse world (Gavins 2007: 129). For this reason, any text-world generated from a narrator's testimony must be enactor-accessible rather than participant-accessible. Moreover, because these worlds reflect the opinions and beliefs of the narrator we must classify them as epistemic modal-worlds (Gavins 2007: 130).

Gavins explores such effects in fictional narration when she analyses two novels, one with a heterodiegetic narrator, and one with a homodiegetic narrator (2007: 129-135). She demonstrates that the latter evokes a sparse initial text-world containing an enactor of the narrator, who then

creates, on a separate ontological level, another text-world in which we encounter rich world-building and function-advancing information more typical of the initial text-worlds of face-to-face, non-fictional discourses. Readers therefore make a double leap from the discourse-world, through what Lahey terms an 'empty text-world' (2004, see also Gavins 2007: 133; Giovanelli 2013: 167), into the second enactor-accessible text-world - a phenomenon Gavins argues is common in reading fiction. However, Gavins argues that readers may adopt strategies to render this discourse-processing experience more prototypical. One of these is to project an enactor of themselves into the initial text-world, where they are in communication with their mental representation of the narrator, allowing them to treat any subsequent text-worlds as if they were participant-accessible. Gavins suggests that in such cases, information is 'perceived as reliable and its source is as trustworthy as any other discourse-world participant would be' (2007: 130). However, this strategy is not inevitable, and it is important to note that readers may not process the testimony of an unreliable narrator as trustworthy. Gavins also suggests that 'although fictional narrators are textual constructs, the reader-participants in literary discourse-worlds often map their knowledge of real-world authors onto these text-world beings' (2007: 129). The strategy is another way of recreating a more prototypical discourse situation.

Gavins also makes the point that text-worlds anchored in the time and place of narration but otherwise empty, can fall 'quickly into the background of this discourse process' (2007: 133). This echoes a suggestion by Galbraith (1995) in her account of deictic shifts in fiction. Galbraith, engaging with debates about whether heterodiegetic narratives necessarily invoke a narrator figure (Banfield 1982, Hamburger 1973), argues that readers can often take up more than one potential deictic position with respect to such fictions. Considering the degree to which readers retain an awareness of such 'empty' text worlds will be critical to my argument for an expanded Text World Theory. I discuss this question further in Chapter 8.

3.3.6 - World-Repair

One phenomenon which occurs frequently in reading, and which becomes significant when we consider how readers' mental representations of discourse change over time, is the phenomenon of 'world-repair'. This is a concept that has its origins in Emmott's notion of 'frame repair' (Emmott 1997, Gavins 2000), and is described by Gavins as follows:

On occasion, the incrementation of new information into a world can misfire, with erroneous components being added (or missed out) of a particular world as a result. [...] Erroneous incrementation can continue or remain in place in a world for as little as a few words or for as long as an entire discourse. However, when a mistake in world-building or function-advancing is detected by a reader or hearer, action is normally taken to correct any inconsistencies or illogicalities which may have arisen in his or her conceptualisation of the discourse as a result. (Gavins 2007: 142)

Such erroneous incrementations may occur for a number of reasons. They may happen as 'a consequence of a lack of concentration on the part of one of the participants' (Gavins 2007: 142). On the other hand, some authors or speakers may intend readers to draw mistaken inferences about the states of affairs they are describing. This occurs in fictional writing when authors aim to trigger a process of world-repair in a subsequent 'twist'. Such experiences, which can occur in novels of all kinds, are particularly common in detective fiction; a genre characterised by frequent examples of authorial misdirection (Emmott and Alexander 2014; Gregoriou 2021).

The effect that such moments of world-repair can have on reading experiences has been explored by various analysts (for example Cruickshank and Lahey 2010; Gavins 2013; Nuttall 2017). However, less attention has been paid to what happens to the initial, erroneous representations that exist in the mind of the reader before world-repair takes place. One possible explanation is that some of these worlds fade from awareness as readers reconcile minor misunderstandings and

inconsistencies. However, others - for example those associated with significant plot twists - may be remembered alongside 'repaired' worlds as integral parts of the reading experience. This possibility tallies with van Dijk and Kintsch's suggestion that the distinction between the textbase and the situation model forms an important part of what is remembered when a discourse is recalled (see Section 2.2.6). I will explore this hypothesis further in Section 8.2.

Throughout Section 3.3, I have shown how Text World Theory provides a powerful theoretical framework for discussing the comprehension of literary texts. However, while the framework makes detailed predictions about the mental representations it predicts readers will form in response to fictional narratives and other discourses, it must not be forgotten that different readers will arrive at different interpretations of a text. For this reason, analysts who draw on Text World Theory frequently compare their linguistic analysis of texts with the responses of readers in a wide variety of different reading contexts. The purposes and benefits of different reader-response methodologies are discussed fully in Chapter 5.

3.4 - Storyworlds

Text World Theory is not the only theoretical framework which draws upon the metaphor of a world to offer a cognitive account of narrative comprehension. For this reason, I now introduce the storyworld framework, and explore how the storyworld model may complement Text World Theory.

3.4.1 - Preliminaries

In Section 3.2, I described how possible worlds theories emerged from theories of modal logic, and outlined ways in which literary critics adapted these ideas to create new ways of describing literary texts. In Section 3.3, I then explained how Text World Theory attempts to account for what happens in the minds of readers as they participate in both literary and non-literary discourses. The storyworlds framework (Herman 2002, 2009; Ryan 2019, 2022; Ryan and Thon 2014) is also a framework which

explores mental representations. However, in contrast with Text World Theory, it focusses specifically on the mental representations created when people experience narratives, and does not attempt to account for other kinds of discourses. Moreover, it does not make the assumption that narratives are necessarily encoded linguistically, but instead proceeds from an axiom that '*story* is a cognitive rather than a linguistic construct' (Ryan 2022: 14). For this reason, the framework has been particularly successful at describing narratives that unfold across more than one medium (as happens, for example, when film franchises spawn spin-off novels: see Ryan 2022; Ryan and Thon 2014 for further discussions).

The storyworlds model has its origins in a wider framework of postclassical narratology, which has itself emerged in part as a response to a wider 'cognitive turn' that has characterised the humanities since the latter years of the 20th Century (Alber and Fludernik 2010; Bruner 1986, 1991; Elfenbein 2020; Fludernik 1996, 2005; Herman 2002, 2003, 2009; Hogan 2003; Palmer 2004, 2010; Zunshine 2003, 2006, 2015). Early attempts to classify the formal components of narrative texts by scholars such as Bal (1985), Genette (1980), Propp (1928) and Todorov (1969) have since been complemented by a focus on what happens when human agents produce and make sense of narratives of all kinds, including virtual reality experiences (Ryan 1999) hypertext fictions (Bell 2010) and immersive theatre performances (Gibbons 2016) as well as more prototypical literary texts. Underlying this approach is the suggestion by Bruner that narrative ranks alongside logical thought as an irreducible tool by which humans make sense of the world (1986: 11, 1991). Herman expands on Bruner's claim by offering a more precise distinction between these two modes of sense-making, distinguishing 'scientific' modes of explanation which result in generally applicable laws from narratives which allow people to understand what is like for particular individuals to experience particular circumstances with specific consequences (Herman 2009: 2). Thus, where structuralist critics spoke of narratives as representations of events ordered in time, Herman suggests that narratives might instead be thought of as 'representations of particularised sequences of events [...]

best viewed as cues used by interpreters to construct mental representations of narrated worlds' (2009: 19).

It is these mental representations that Herman calls storyworlds. Crucially, in Herman's thinking, the term storyworld can refer 'to the world evoked implicitly as well as explicitly by a narrative' (2009: 106). This is one of the key features that distinguishes the storyworld model from the Text World Theory framework. Text World Theory is, first and foremost, a model of *linguistic* comprehension which allows linguists to identify world-like representations that are prompted by specific words and grammatical constructions. In contrast, the storyworld model begins with an assumption that, while texts and other artefacts act as blueprints for building world-like mental representations, the states of affairs that readers and speakers imagine when processing narratives extend beyond those described by the texts and artefacts that encode them. Significantly, this means that narrative events do not need to be represented outside of the mind in order for storyworlds to exist as mental constructs. As Herman points out, a storyworld can belong to 'a tale that is projected but never actualised as a concrete artefact' such as a story 'about ourselves that we contemplate telling to friends but then do not' (2009: 106): something that Text World Theory does not attempt to account for.

Herman's claims that narratives are evoked implicitly as well as explicitly allows for the application of background knowledge during comprehension, as acknowledged by the other frameworks described in this chapter. However, it also leaves open the possibility of readers engaging in broader creative acts during narrative comprehension, for example by anticipating unnarrated events (such as those discussed in Whiteley 2010), or by imputing mental states to characters which would require specific linguistic cues in order to be acknowledged using Text World Theory.

3.4.2 - Ryan's Development of the Storyworld Framework

On the basis of Herman's definition alone, it is not immediately clear how we might relate storyworlds to specific elements of other frameworks, such as the Textual Actual Worlds and Textual Reference

Worlds of Possible Worlds Theory, or to the empty text-worlds and narrated epistemic modal-worlds of Text World Theory. However, Ryan has expanded Herman's framework, offering more rigorous definitions and deeper clarity. She suggests that the worlds invoked by narrative texts can be characterised as follows:

Worlds can be thought of in two ways: as containers for entities that possess a physical mode of existence (events can be considered such entities because they affect solid objects and are anchored in time and space) and as networks of relations between those entities. (Ryan 2019: 63)

Just as with Text World Theory, the notion of a mental representation of entities and relations between them parallels the definitions of mental spaces, mental models and situation models discussed in the previous chapter.

Ryan has also offered an explicit account of how storyworlds and possible worlds differ:

If we give a negative truth value to all the propositions that assert the existence of something, except for the proposition "there is a rock," we will generate an ontologically complete possible world [...] Now consider the minimalist story proposed by E. M. Forster as an example of a plot: "The king died, then the queen died of grief" [...] If there is a possible world that contains only a rock, there should also be a possible world with just a king, a queen, and the two events that make up Forster's example. But while this would be a possible world in the logical sense, it would not be a storyworld in a phenomenological or experiential sense because it lacks the ability to stimulate the imagination. We read Forster's narratoid as a collection of propositions to which we assign a positive truth value, but we do not attempt to construct a world in which these propositions hold true. (Ryan 2019: 69)

From this, it is clear that Ryan sees narrativity not as a formal property of a text itself, but as something that emerges in the interaction between text and mind. Ryan compares Forster's 'narratoid' to the six-word short story frequently (but perhaps erroneously) attributed to Hemmingway, which reads 'For sale. Baby shoes. Never worn.' This, she claims, results in her being more tempted to construct a world to fill in the gaps in this otherwise puzzling scenario. For Ryan, the salient feature of a storyworld is that 'we imagine that there is more to this world than what the text represents' (2019: 70).

Ryan then extends this notion with a discussion of 'ontological completeness'; the property of a world which means that for any pair of contradictory propositions about that world, one must be true and the other false. She notes that ontological completeness is a property both of the actual world, and of the worlds of possible worlds theory. On the other hand, it is never true of fictional worlds, since '[f]inite texts, the only texts that humans are capable of producing, are bound to create incomplete worlds' (2019: 74). Nonetheless, Ryan suggests that humans experience these worlds *as if* they were complete:

While readers know that the storyworld would not exist without the text (or texts), they pretend that it has an autonomous existence and that the text represents it rather than creates it. This means that readers construct storyworlds and their characters as sharing the ontological status of the real world and of its inhabitants unless otherwise specified.

(Ryan 2019: 75)

In other words, according to Ryan's formulation, readers and listeners treat missing information in a narrative as if it were information that could in theory be known, rather than as information that is ontologically unknowable. This represents a clear departure from the way that possible worlds theories describe the logically unknowable TRW of a text.

As with possible worlds theories and Text World Theory, the storyworlds framework also acknowledges the role of the principle of minimal departure in readers' construction of rich worlds from finite texts (Ryan and Thon 2014: 36). Furthermore, Ryan has made claims about the scope of storyworlds, arguing that a storyworld's size 'is a function of the amount of information it gives about the world it purports to describe' (2019: 68). Thus storyworlds can vary in scope from the miniscule worlds of jokes and microfictions to the epic worlds generated by trilogies or multi-volume series. Ryan also makes reference to the notion of storyworld 'expansion' (2019: 71), in which the storyworld prompted by an initial text may be expanded by a subsequent text. In the case of large commercial franchises, this subsequent text may be created by a different author or realised through a different medium.

Given the large size of many storyworlds and the limitations on working memory, it seems reasonable to assume that, with the possible exception of storyworlds generated by microfictions, storyworlds must be cognitive constructs that exist primarily as entities in the long-term memory. Any storyworld for a novel consumed in more than one sitting must be stored in the long-term memory, and subsequently retrieved and modified during later reading episodes. The notion that two or more discrete discourse experiences may contribute to building and adapting a single representation in long-term memory is one that Text World Theory has not yet explored in detail.

To date, the storyworlds framework has developed almost entirely independently from Text World Theory. In the remainder of this thesis, I will suggest that the two frameworks may in fact provide complimentary accounts of the ways in which linguistically encoded narratives are understood. I begin to build this argument in the following section, setting up hypotheses that I test in my own research which I discuss in Chapters 6 and 7.

3.5 - Reconsidering Text World Theory alongside the Storyworlds Framework

In this final section of Chapter 3, I compare the three theoretical frameworks I have introduced so far. As I discussed in Section 3.3, Text World Theory will be my primary theoretical focus in the remainder

of this thesis. However, I will argue that one way in which Text World Theory might be expanded is by drawing on aspects of the storyworld model. To this end, I will propose three hypotheses which I will test in my own empirical work.

3.5.1 - A Comparison of Worlds Theories

While possible worlds theories, Text World Theory and the storyworlds framework share some features, they remain independent models which aim to account for different phenomena. As is evident from my discussions above, and as I will demonstrate through my own empirical work in later chapters, the mental representations that listeners and readers create during narrative comprehension are distinct to both the Textual Actual Worlds (TAWs) and the Textual Reference Worlds (TRWs) of Ryan's possible worlds theory. Mental representations of narratives are not simply mental counterparts of TAWs, since readers frequently make claims about fictional states of affairs which are not defined in a TAW. Text World Theory acknowledges this, by describing in detail how readers supplement the information provided in a text with inferences made by drawing on background knowledge. This is also acknowledged in Ryan's storyworlds model, which regards texts as an invitation to create worlds in the imagination. The mental representations created during narrative comprehension are also not simply mental counterparts of TRWs, since readers are conscious of being unaware of states of affairs which they know (or at least pretend) have a fixed value in the TRW. This reflects a truth about how human subjects experience the real world. In everyday life, people do not live only with facts and ontological gaps. Instead they build and update working models of the world which contain states of affairs they are certain about, states of affairs they have varying degrees of confidence about, and states of affairs they know nothing about but understand to be potentially knowable. One axiom of literary linguistics is that people comprehend narrative texts using the same cognitive tools they use to comprehend the real world (Stockwell 2002: 94). This would suggest that readers build working models of the TRWs of narrative texts that have similar ontological complexity. This aspect of narrative comprehension is not accounted for in Ryan's possible worlds

theory, which posits a single TRW with a unified ontological status. However, Text World Theory - which models states of affairs of different ontological status existing at different conceptual distances from a base space - is a framework that is well-placed to explore this aspect of comprehension.

Having established that cognitive models of comprehension must account for phenomena that are not accounted for in logical models of textual semantics, I now consider how the storyworlds model differs from Text World Theory. To do so, it is useful to consider in more detail what happens when readers make hypotheses about fictional worlds as they read. Text World Theory acknowledges that discourse participants often use discourse-world knowledge to supplement linguistic cues. For example, a discourse participant encountering the words 'menu' and 'waiter' in a story is likely to infer that the story is set in a restaurant. They may then add entities from their existing restaurant schema - such as tables and chairs - to their mental representation of the narrated events, even if these are not mentioned in a text. However, such inferences take place at a single ontological level. They are, I suggest, categorically different from inferences that discourse participants make about the most ontologically prior text-world of a fictional text on the basis of the beliefs of, and testimonies from, the characters that inhabit it.

This distinction is already encoded within Text World Theory through the notion of the empty text-world. Gavins suggests that, from a Text World Theory perspective, such worlds are 'normally text-initial but ultimately immaterial' (2007: 133). This claim reflects the truth that in a homodiegetic narrative, the reader or listener has no direct knowledge about what occurs in the initial text-world, other than via the narrator's linguistic representation of it. However, in Ryan's formulation of the storyworlds model, readers conceive of a world - equivalent to the empty text-world of Text World Theory - of which the narrator's discourse purports to be a representation, and actively work to populate this through acts of imagination.

The distinction between inferences about states of affairs in the modal-worlds created by narration, and about states of affairs in ontologically prior worlds is, I suggest, critical. Firstly, as I will argue when I present the findings of my own studies in Chapters 6 and 7, readers of fictional texts

frequently make hypotheses about fictional states of affairs which are not explicitly specified in narration. Such hypotheses are hypotheses about events in the world projected by the narrative, and not hypotheses about a narrator's account of events. Secondly, as I will argue in more detail when I discuss Atwood's *Surfacing* in Chapter 6, readers who suspect that a narrator is unreliable may read with an awareness of potential discrepancies between a narrator's representation of the world they inhabit and what they themselves believe about that world.

For these reasons, I suggest that to provide a complete account of how we comprehend narratives, we need to account both for readers' mental representations of what is conveyed through the narrative, and their representations of the world that narrative purports to be about. This distinction is particularly apparent in the case of unreliable homodiegetic narration. However, unreliable narration may not be the only case in which this distinction is significant. Even in cases of heterodiegetic narration, readers may remain conscious of what information they have been explicitly told and what they have inferred. This, it seems to me, is key to understanding the effect of reading the six-word short story that Ryan discusses when she talks of narratives as storyworld-forming (see Section 3.4.2). In this example, a reader is likely to construct a 'working model' of a storyworld in which they are confident that unworn baby shoes are being sold, conscious that they are not certain about *why* this is the case, but able to offer one or more possible explanations for how this state of affairs *may* have come about. Indeed, it seems to me that much of the impact of this story comes precisely from the way in which it invites readers to compare and contrast, in a conscious and reflective way, the narrator's account with their own inferences about events. In other words, the narrative foregrounds the fact that a single text with a single text-world conceptual structure can potentially describe more than one possible storyworld. As I will demonstrate in succeeding chapters, this experience is similar to those reported by readers of Atwood's fictions.

One more distinction between text-worlds and storyworlds is significant. Herman defines a storyworld as a 'global mental representation' (2009: 206); a definition with which Ryan concurs (2019: 63). This description suggests that the 'worlds' that Ryan and Herman describe in their

storyworlds model differ in scope from the ‘worlds’ of Text World Theory. While the worlds of Text World Theory are potentially ‘as richly detailed as the discourse-worlds from which they spring’ (Gavins 2010: 10), they are constrained in practice by a finite set of world-building and function-advancing propositions, and by the principle of text-drivenness (see Section 3.3.1). Ryan’s storyworlds, by contrast, are imagined as ontologically complete. This implies a many-to-one relationship between text-worlds and storyworlds, with long narratives prompting a series of discrete text-worlds, each of which is offered as a representation of a discrete part of an unfolding storyworld.

It seems evident then, that while it is correct to refer to both storyworlds and text-worlds as mental representations, storyworlds are different kinds of mental entities to the mental representations described by Text World Theory. This notion tallies with accounts of the comprehension process that Ryan has given independently of her work on storyworlds:

Reading also involves two levels of memory: Whereas the global representation is stored in long-term memory, smaller textual units affect primarily what has been called the sketch-pad of short-term, or episodic, memory (Ryan 2003: 234, my emphasis)

In Chapter 2, I noted that further clarity was needed about what happens as text-world representations are passed into and retrieved from the long-term memory. Later in this thesis, I will explore the idea that it is productive to describe storyworld representations as constructed from text-world representations as readers process and remember discourse. To do this, my own empirical work will focus on exploring what happens to text-world representations as readers comprehend lengthy narratives.

3.5.2 - Towards an Extended Text World Theory

My focus in the rest of this thesis will be on exploring how Text World Theory might be expanded to account for what happens to readers’ mental representations of narratives over time. At the end of

this section I will offer a series of hypotheses to be tested through empirical work. Before I do so however, I wish to consider in more detail exactly what kind of entities text-world mental representations might be.

I begin by making an assumption, motivated by three claims from previous theorists. The first is Werth's assertion that text-worlds fall 'within the definition of "mental space" of Fauconnier' (1999: 20). The second is Fauconnier and Turner's claim that mental spaces 'operate in the working memory but are built up partly by activating structures available from long-term memory' (2002: 102). The final claim is that working memory is not simply used for information storage but also information processing (Baddeley 1999; Daneman and Merikle 1996). Given these claims, it seems reasonable to suggest that text-worlds are initially created and updated as constructs in the working memory.

However, as I described in Section 2.3, standard models of working memory suggest that it is limited both in terms of capacity and duration. In lengthy discourses, even individual text-worlds may contain more information (world-building elements and function-advancing propositions) than can be held in working memory at one time, suggesting that interactions between working and long-term memory are significant during moment-by-moment reading experiences. Such interactions will also be significant as discourses progress, and readers create novel mental representations (world-switches or new modal-worlds) using the limited resources of the working memory. This notion tallies with Ryan's suggestion, quoted above, that reading involves two levels of memory, and that larger global representations are built up from smaller units.

One way to approach the question of what happens to text-world mental representations in the long-term memory would be to begin with a hypothesis that they are remembered and recalled perfectly. However, much research exists to demonstrate that human memories are fallible, and that in the medium to long term, readers forget much of what they read, including most specific words and syntax (Elfenbein 2018: 102-3, Emmott 1997: 41 and Section 2.3 of this thesis). From a logical perspective, it is conceivable that the conceptual structure of a text is retained in the mind even when the individual words and phrases that prompt it are forgotten. However, given that the total number

of world-switches and modal-worlds prompted by even a relatively modest short story may run into hundreds or even thousands, it seems likely that some elements of the conceptual structure will also be forgotten after reading is completed. This forms the first hypothesis which I will investigate in this thesis:

Hypothesis 1: Just as readers and listeners do not remember narratives word-for-word, so they do not recall them world-for-world. In other words, the conceptual structure prompted by a narrative during moment-by-moment comprehension may not always be retained when a text is stored in, and subsequently retrieved from, the long-term memory.

If the original conceptual structure is not preserved, then a limited number of alternative scenarios are possible. It is possible that some elements of conceptual structure (text-worlds and modal-worlds, complete with their constituent world-building elements and function-advancing propositions) are omitted in their entirety. In practice however, this scenario is hard to test in empirical work, as it is difficult to demonstrate that information omitted in a particular study could not have been reproduced by the same participants under different conditions. However, other possibilities exist which are easier to investigate through reader-response work. Two of these form the final two hypotheses I will test in this thesis:

Hypothesis 2: As representations of a narrative are stored in long-term memory and subsequently retrieved, the conceptual structure of the representation is simplified as readers assume that world-building elements and function-advancing propositions presented in modal-worlds can be taken as reliable descriptions of ontologically prior text-worlds.

Hypothesis 3: As representations of a narrative are stored in long-term memory and subsequently retrieved, elements are added to the conceptual structure as readers imagine states of affairs at the most ontologically prior level of the discourse that are not described explicitly, or as they create representations of the beliefs, desires or other mental states of characters that are not cued explicitly in the text.

In order to test these hypotheses, I will present the results of two different reader-response studies in which I analyse reader summaries of passages of Margaret Atwood's prose fiction, gathered under different conditions. In each study, I will perform text-world analyses of reader summaries and of the texts that prompted them. As I discuss these results, it will be important to remember that storage in and retrieval from the long-term memory are separate processes, and that both these processes will have taken place to generate the reader summaries I will discuss. To an extent, this is inevitable in any reader-response study. However, comparing data gathered using different methodologies will allow some level of speculation about the different processes that occur. I discuss the implications of this more fully in the analyses that follow.

Before I go on to present my own findings, I will offer a general introduction to the different reader-response methods available to stylisticians, which I do in the following chapter.

4. Reader-Response Methodologies

Stockwell has suggested that the proper business of literary criticism is not texts in isolation, but readings generated by people (2009a: 1). Motivated by this principle, text-world analysts (in common with other contemporary stylisticians, for example Bell et al (2021), Peplow et al (2015), Swann and Allington (2009) and Whiteley and Canning (2017)) devote considerable energy to investigating not only literary texts in isolation, but also reactions to texts generated by a variety of readers in a variety of reading contexts. In this chapter I introduce such reader-response approaches in detail.

I begin the chapter by providing a brief overview of how reader-response theories have emerged within a wider literary critical landscape, and by defining exactly what we mean by a 'reader response' to a work of fiction. In Section 4.2, I describe several of the methodologies employed by contemporary stylisticians to explore the different ways that readers react to texts, and discuss their advantages and disadvantages. I conclude the chapter by introducing the two original reader-response studies I will be presenting in this thesis.

4.1 - An Introduction to Reader-Response Theories

4.1.1 - Reader-Response Theories in Context

Literary texts exist as autonomous objects. However, they are created by living and breathing authors, who draw on particular life experiences and practice their craft within a particular culture at a particular moment in history. They are then read by a range of readers in a range of circumstances. Different literary theories have drawn different conclusions about which of the three entities - text, author and reader - constitute valid objects of critical enquiry (Bennett and Royle 2016; Bertens 2012; Eagleton 1983; Habib 2011; Harker 1988). In providing a framework for discussing all three entities, Text World Theory therefore differs from many previous approaches to literary analysis.

As English was established as an academic discipline in the years following the First World War, the approaches of 'new criticism' and 'practical criticism' were built on assumptions that literary

texts could be isolated from cultural and historical contexts, and that authorial intent and readerly interpretation could be ignored when exploring literary meaning (Bertens 2012; Eagleton 1983; Habib 2011; Harker 1988; Wales 2014). While most contemporary stylisticians would reject these assumptions, the practice of 'close reading' - of paying careful attention to particular linguistic features and their effects - fostered within these traditions had an influence on the emergence of stylistics in the decades that followed (Wales 2014: 400).

The 1970s saw a reaction against such text-centric methodologies. Alongside the post-structuralist approaches of theorists such as Barthes (1989) and Derrida (1967a, 1967b), there emerged new reader-response approaches (exemplified by Culler 1975; Fish 1973a, 1973b; Holland 1975; Iser 1974, 1978; for discussions see Bennett and Royle 2016; Eagleton 1983; Habib 2011; Wales 2014). These approaches highlighted the role of the reader in interpreting a text. Iser, in an analysis that resonates with many of the arguments made by cognitive linguists introduced in Chapter 2, notes how even realist novels cannot present a complete reality. He emphasises the role of the reader's imagination in filling gaps in a text, summarising his stance by suggesting that '[i]t is in the unwritten part of a book that the reader has his [or her] place' (1974: 119).

Fish also foregrounds the role of the reader in textual interpretation. In an influential critique of stylistics, he argues against what he sees as naïve attempts to establish deterministic links between particular linguistic structures and particular meanings. Instead, he makes a case for a new 'affective' stylistics, in which 'the focus of attention is shifted from the spatial context of a page and its observable regularities to the temporal context of a mind and its experiences', and in which the formal properties of language are regarded as 'cues for the reader to engage in activities' (1973: 109-10). Significantly, he emphasises the importance of social norms in shaping the possible meanings of a text, noting that language events always occur in specific contexts, and claiming that 'these norms are not embedded in the language [...] but inhere in an institutional structure within which one hears utterances as already organised with reference to certain assumed purposes and goals' (1980: 306). Fish's criticisms can be read as a challenge to the purpose of stylistics, which aims to account for how

particular linguistic choices can give rise to particular meanings. This point has been addressed by Toolan, who suggests that acknowledging the role of the reader does not necessarily require 'privileging the undecidability of the wilder deconstructionists' (1996: 124), and in doing so, accepting that any interpretation of a text is possible. Instead, he notes that interpretation is a communal activity, and that '[b]y prevailing conventions and community preference, the potential infinity of possible interpretations is discounted by most readers, constrained by a desire for sharedness of literary experience' (Toolan 1996: 128). Thus, while Toolan acknowledges that any reading is necessarily subjective, and that any interpretive framework necessarily foregrounds some interpretations over others, he argues that the task of connecting linguistic choices and meanings is still a productive one:

Literary linguistics does not adopt the assumption that *the* meaning is in the syntax as Fish portrays it as doing, but rather makes the assumption that syntactic (and lexical) characteristics [...] themselves often carry meanings. And the rationale for these meanings can often be corroborated independently. (Toolan 1996: 128, emphasis in original)

One thread that unites the arguments made by Fish and Toolan is the notion that if we are to seek a complete account of literary comprehension, we cannot simply consider *the reader*, but must instead think in terms of a multitude of different *readers*. In Iser's reader-response theory, the 'ideal reader' of a text is one crafted by the author, with whom real readers may or may not choose to align themselves (Iser 1974: 115; see also Booth 1961: 137). However, as Swann and Allington (2009) note, we can contrast the responses expected of this figure, invoked in much traditional critical analysis, with the behaviour of real readers. It is for these reasons that contemporary stylisticians have devoted increasing energy to studying not only texts themselves, but also the myriad ways in which different readers respond to texts in specific reading contexts.

Making the case for what he terms an 'empirical stylistics', Miall rejects Culler's assertion that the 'idiosyncratic' behaviour of real readers matters less than the interpretations imputed to 'ideal' or competent readers who 'read and interpret works in ways we consider acceptable in accordance with the 'institution of literature' (Culler 1975: 143). Miall suggests that '[r]ather than speculating about the effect of reading, as traditional reader response studies have done', much is to be gained by exploring what evidence can be gathered from many different readers, and describes the scope of what he sees as a 'first meaningful and coherent scientific study of the literary phenomenon' (Miall 2006: 2). Hakemulder and van Peer make a similar appeal for an 'empirical approach to stylistics' which 'embrace[s] a more scientific approach and requires close collaboration between stylisticians and psychologists' (2015: 202).

The empirical stylistics outlined by Miall draws heavily on established scientific methodologies. In this tradition, analysts usually recruit participants and present them with specific textual extracts, which they may or may not have manipulated or framed in particular ways, in order to test particular hypotheses (2006: 22-34). More recently however, Peplow and Carter have distinguished the 'empirical study of literature' (ESL), characterised by 'researchers carrying out reading tests in quasi-laboratory conditions', with what they term the 'naturalistic study of reading' (NSR) (2017: 441). In the latter mode, analysts seek to explore how readers engage with complete texts in more naturalistic settings. Today, stylisticians acknowledge that linguistic accounts of meaning generation must be able to account for responses to texts generated in settings such as book clubs, classrooms and online discussion forums, as well as for readings produced by professionally trained literary theorists, or those generated in controlled or laboratory-like conditions. Further discussions and introductions to the broad scope of current reader-response work can be found in Bell et al (2021), Gibbons and Whiteley (2018), Hakemulder et al (2016), Peplow et al (2015), Peplow and Carter (2017), Sanford and Emmott (2012), Steen (1991), Swann and Allington (2009), Van Peer (1986). Van Peer et al (2007) and Whiteley and Canning (2017).

4.1.2 - What do we Measure when we Measure Reader Responses?

Having made a case that it is important to study the ways in which different readers respond to texts, I now offer a brief overview of the different kinds of data that analysts may gather when attempting to learn about different reading experiences.

In much traditional literary criticism, regardless of whether a critic has discussed their own interpretation of a text or appealed to the existence of a hypothetical ideal reader (see Section 4.2.1), the phenomena they are attempting to explain are products of their own 'introspection'; in other words, subjective reports of their own reading experiences. Such introspective accounts have sometimes been treated with suspicion by stylisticians, particularly when they have been produced by trained critics who bring a 'heightened and expert sensibility' to their own readings (Stockwell 2021: 165). However, as Stockwell argues, introspection is the only way of accessing particular aspects of reading experiences:

The difficulty with [alternative methods] is that they are indirect ways of modelling readerly self-consciousness. Only introspection is direct: it might be idiosyncratic and subjective, but of course it remains the only direct way of 'getting at' the actual experience of reading. (Stockwell 2021: 168)

One way of attempting to address the problems of subjectivity and idiosyncrasy is for analysts to gather introspective reports from multiple readers. Such data may confirm that an analysts' own reading is shared more widely, or may allow the analysts to identify and account for readings that they themselves did not arrive at. Clearly, the more readers that are consulted in any study, the more confidence an analyst can have that any particular response is common rather than eccentric. However, reports gathered from different kinds of readers may vary in nature. Readers may differ in disposition, with some subjects more alert to - or more able to articulate their responses to - particular textual features (Stockwell 2009b). Moreover, Miall has suggested that while many literary scholars

are primarily concerned with *interpreting* texts, many non-academic readers are more concerned with *experiencing* them, resulting in them placing more emphasis on how literary encounters make them feel than on what texts mean (2007: 3). Whenever analysts wish to collate reader responses for analysis, they must therefore endeavour to gather data systematically so that biases resulting from particular sampling methodologies can be reduced or acknowledged.

While subjective reports of reading experiences can be instructive, they do not provide analysts with direct access to mental processes. For these reasons, such accounts can be contrasted with data of other kinds. For example, studies can be done of the time taken to read a particular unit of discourse (as exemplified by Sanford and Emmott 2012), or of readers' eye movements as they pay more or less attention to particular textual components (as exemplified by Carrol et al 2015). Such studies, which often draw on methodologies used in other areas of cognitive psychology, can allow analysts to make inferences about mental processes which may be inaccessible to introspection (as, for example, Sanford and Emmott do when they draw on the results of reading time experiments to explore the inferences that readers make when they combine textual prompts with background knowledge: Sanford and Emmott 2012: 9-44).

It would, however, be an oversimplification to suggest that such non-introspective approaches can be bracketed neatly under the label of 'empirical' studies, while implying that studies of introspective reports are inherently more 'naturalistic'. In reality, data of both kinds can be collected in different ways, and the extent to which an individual observation may be counted 'introspective' may be one of degree rather than of binary distinction. For example, one way of learning about a reader's experience of a text is by asking them to summarise it (as exemplified Bartlett 1932, and demonstrated in my own studies described in subsequent chapters). Such summaries clearly reveal something of a reader's subjective experience of a text. At the same time, the presence or absence of a particular feature in a summary (such as the use of modal language, or reference to a particular character or event) can be verified empirically, and may reveal clues about unconscious processes that take place during comprehension and recall.

For these reasons, before introducing individual data-gathering methodologies in more detail, I offer a more general discussion of the ways in which different kinds of reader-response data can be distinguished. Here I focus on five ways of distinguishing data sets: whether they are gathered during or after reading, whether they contain 'verbal' or 'non-verbal' data, whether data is 'closed' or 'open', whether analysts exert much or little control over their subjects, and whether studies are 'experimental' or 'naturalistic'. Further discussions of these distinctions can be found in Steen (1991) and Whiteley and Canning (2017).

4.1.2.1 - Data collection during and after reading

Data about reading can be gathered while reading is taking place, or after the event. This is sometimes referred to as measuring 'online' and 'offline' effects (Castiglione 2017: 104; Whiteley and Canning 2017: 74), a terminology I avoid since much contemporary reader-response research is carried out on the internet, and the term 'online' creates potential for confusion. Measurements of reading time or eye movement necessarily take place during reading, while verbal reports must be gathered afterwards. However, 'think-aloud' studies, in which readers are encouraged to articulate their moment-by-moment impressions of a text (Miall 2007: 29-21, Whiteley and Canning 2017: 75), can be distinguished from studies which seek responses only once an entire text or extract has been read. In the latter case, responses may be gathered immediately after reading, or after a period of days or weeks has passed, introducing the possibility that different memory processes have different effects on the responses received.

My own research focus on representations of narratives in the long-term memory, and as a result, my studies focus entirely on responses gathered after reading has taken place.

4.1.2.2 - Verbal and non-verbal data

Verbal data comprise readers' descriptions of aspects of their reading experiences, presented in their own words, and are the principal way of accessing readers' own introspections. Verbal data sets can

be distinguished from quantitative measurements, or instances when readers have allocated themselves to one of a number of predefined categories (even if those categories are given linguistic labels, as happens, for example, when analysts ask participants to assign themselves to particular ethnic groups or social classes).

Verbal data can often be less predictable in form than non-verbal data. For example, when posed with an open question in an interview or a free-text box on a questionnaire, different readers may present answers of very different lengths. Steen (1991: 564) has suggested that verbal data is often easier to collect, but that non-verbal data is often easier to analyse. Verbal data can be further divided into written and spoken data (Steen 1991: 567), with spoken data more likely to capture spontaneous responses, but requiring extra effort to gather and transcribe before analysis can be done.

One advantage of verbal data is that readers' verbal responses can be analysed using the same stylistic methodologies as the texts that prompted them. This strategy is exemplified by Whiteley's analysis of discussions of Kazuo Ishiguro's *Remains of the Day*, in which she observes reading group participants attributing mental states to characters that are not described explicitly in the novel itself (2010: 125-6, 2011: 32); a phenomenon she attributes to the readers' abilities to engage in 'mind-modelling' (Baron-Cohen 1997; Stockwell 2015). In my own analyses, which I describe in the following chapters, I compare the text-world conceptual structures of readers' verbal summaries of narratives with the conceptual structures of the texts that prompted them. This approach, I argue, may provide clues about mental processes that are not directly accessible through introspection.

4.1.2.3 - Closed and open data

Data sets can be distinguished by whether they are 'closed' or 'open'. When submitting closed data, participants are limited to choosing from a finite number of pre-determined responses, as occurs for example when they select options in a multiple-choice question. When submitting open data, such as by drafting a free-text response, they have more freedom to reflect elements of their reading

experience that an analyst may not have anticipated. Steen (1991) notes that closed data can be easier to analyse, and can make it easier for analysts to assign statistical weight to findings, but will always reflect the preconceptions of the analyst rather than the priorities of the reader.

In my own research, I draw primarily (though not exclusively) on open data. For example, when I ask participants to summarise passages of Atwood's narratives (see Chapter 7) I ask them to do so 'in their own words', and place no constraint on the length of the responses they submit. This has the advantage that it minimises the extent to which participants' responses are constrained by my pre-existing conceptions of what a summary should look like. However, it means that different participants provide summaries of different lengths and submit different levels of detail. I discuss the implications of this more fully when I present the results of my own studies in subsequent chapters.

4.1.2.4 - Degree of control

Another factor which determines the nature of conclusions that can be drawn from a particular reader-response study is the degree of control that the analyst has exerted over participants' reading and data generation. When data is collected in laboratory-like conditions, analysts can exert a high degree of control over what participants read, the conditions in which they read it, and the ways in which they respond. Conversely, when analysts gather data from previously existing sources such as independently generated online discussion forums, they have little or no control over what is submitted or how a text has been read (if, indeed, the text has been read in full at all). The degree of control that an analyst has varies on a cline that spans different methodologies.

The two studies I discuss in this thesis differ in the degree of control I exert over participants. I discuss the implications of this more fully in the relevant chapters. I also make the case that when I observe evidence of similar behaviours in both loosely and tightly controlled studies, this allows me to claim with more confidence that the phenomena I identify represent common responses to texts.

4.1.2.5 - Experimental and naturalistic studies

One more distinction that has been noted by analysts is between ‘naturalistic’ and ‘experimental’ data. (While it is fair to say that ‘empirical stylistics’ (ESL) tends to be more concerned more with gathering experimental data, and the naturalistic study of reading (NSL) with gathering naturalistic data, we note that ESL and NSL refer to academic traditions rather than to features of data sets, and the terms are not synonymous).

As Peplow and Carter have noted, much empirical study of literary comprehension has taken place in tightly controlled studies, in which ‘researchers strive to eliminate all extraneous variables so that, as much as it [sic] can be, the cognitive processes of reading can be isolated and studied as independently as possible’ (2017: 441). They contrast this approach with attempts to study reading processes that happen in the absence of experimenters, such as the study of spontaneously generated reviews of texts. Naturalistic studies may therefore focus on attempts to gather data about reading that happens outside of laboratory-like conditions and about texts that have been selected by participants rather than experimenters. They may also be constructed to focus on responses offered spontaneously by participants rather than anticipated by analysts (For further discussions see Peplow and Carter 2017; Peplow et al 2015; Steen 1991; Swann and Allington 2009).

One obvious reason for constructing naturalistic studies is to minimise the effects of the ‘observer’s paradox’ (van Peer 2014: 81), which notes that experimental subjects always behave differently when they know they are being observed, and governs all empirical work in psychology. However, there is another reason why naturalistic approaches can be particularly valuable when studying literary comprehension. Analysts have suggested that readers can adopt different comprehension strategies in different circumstances. For example, Vipond and Hunt (1984) propose that recipients of both conversational and literary narratives can engage in either ‘point-driven’, ‘story-driven’ or ‘information-driven’ reading, each of which draw on different cognitive strategies. In their model, point-driven reading is characterised by a desire to look beyond the literal meaning of a narrative and an attempt to understand why a particular narrator is telling a particular story in a

particular discourse context. Story-driven reading is more concerned with ‘lived-through experience’, and with ‘interesting, affectively-arousing events’ which ‘can be enjoyed quite independently of any implied author’ (Vipond and Hunt 1984: 269), while information-driven reading is more concerned with extracting propositional content. The authors emphasise that these different strategies are not necessarily characteristic of particular readers, but can be employed by the same readers on different occasions. Significantly, both they and subsequent authors (Kurtz and Schober 2001) have suggested that readers in laboratory settings may be more likely to embark on information-driven reading strategies, meaning that many studies focussed on generating experimental data in controlled conditions may not prompt the same cognitive processes that readers employ when reading in other circumstances.

As with other ways of characterising data collection, the distinction between experimental and naturalistic studies is not a binary one (Giovannelli 2022). Once again, the two reader-response exercises I describe in this thesis fall on different positions on this cline. Combining studies based on different methodologies does, I suggest, allow me to place greater confidence in findings that are replicated across both studies.

4.1.2.6 - Studies combining data of more than one type

As a final point, I note that individual reader-response studies may gather data of more than one of the types described above. For example, Bell et al have recently pioneered what they describe as a ‘new paradigm’ in reader-response methods (2019: 241), by asking readers to respond to a piece of digital fiction by completing a questionnaire that elicited closed, quantitative responses, and then using these answers as prompts to generate open-ended data. Citing Messenger Davies and Mosdell (2006: 33), they suggest that the resulting qualitative comments provide nuance and explanation that contextualise their numerical findings. In the first of my own reader-response studies, I have attempted to build on previous analyses of online book reviews, a method normally used to generate sets of open verbal data (see the following section for details), by devising a data sampling

methodology that draws on closed elements of reader submissions and allows the construction of comparable corpora of reviews which enable quantitative comparisons of responses to different texts. I explain this methodology more fully in Chapter 5.

Having explored the general ways in which different data sets may be compared, I now go on to discuss a number of specific reader-response methodologies in more detail.

4.2 - An Overview of Reader-Response Methodologies

In this section I explain four specific methodologies which are commonly used for studying reader responses to texts: reviews of professionally published criticism, reviews of contributions to community-based websites, analyses of reading group conversations and questionnaire-based studies. My aim in this section is not to provide a comprehensive overview of techniques available to stylisticians, but to foreground the techniques and previous research most relevant to the studies I present in this thesis.

4.2.1 - Reviews of Criticism in Academic Contexts

The term 'reader-response study' tends to be used to describe the study of responses gathered outside of academic settings. However, reviews of literary works in academic publications can be a valuable source of textual interpretations that stylisticians may seek to explain, and may provide a useful way of demonstrating that an analyst's own introspective response to a text is not an idiosyncratic one. (For typical examples of studies drawing on such data, see Bray 2001, Gavins 2013 and Giovanelli 2022).

It is important to remember however, that readings generated by trained literary scholars may not be typical of readings generated elsewhere. This caveat has been noted by Bray (2007), in his discussion of responses to free indirect discourse in the work of Jane Austen and Charlotte Smith. Stylisticians frequently claim that the use of free indirect discourse in prose fiction can simultaneously

convey elements of both a narrator's and a character's speech and/or thought patterns (Leech and Short 255-81; Short 1996: 306-16; Sotirova 2006. For more about 'dual-voice hypothesis' of narrative fiction see Banfield 1982; Galbraith 1995; Hamburger 1973). Bray uses reader-response data to argue that some readers do indeed arrive at such a 'dual-voice' interpretation of some narrative passages. However, he qualifies this finding by noting that his sample is restricted to responses from undergraduate English students, and suggests that the dual-voice reading may be one that is only arrived at by a 'small, specialised' minority of trained readers (2007: 48).

Responses to works generated in non-academic contexts - for example in reading groups discussions or online book reviews - may be different in form and kind to those published by academic critics. However, as Gavins (2013: 8) notes, there is nothing to prevent professional critics from contributing to discussions that take place in non-academic settings, and when they do so, they may produce very different kinds of responses to those they publish in journals and monographs. For this reason, the term 'criticism in academic contexts' is preferable to 'criticism by academics'.

When discussing responses to Atwood's novels in the following chapters, I juxtapose my own studies of data gathered in non-academic contexts with reviews by professional critics. Where responses gathered in non-academic contexts echo those from academic publications, this provides evidence that particular readings of a text occur widely, and are likely to be indicative of commonly occurring comprehension strategies.

4.2.2 - Reading Group Studies

Reading groups - small groups who meet face-to-face in informal settings to discuss literary texts - are another potential source of reader-response data. Though I do not draw on data from reading groups myself in this thesis, such studies have been used extensively by stylisticians whose findings frame my own studies, as I explore below.

Analysts may conduct reading group studies by approaching existing reading groups and asking to observe discussions, or they may assemble groups of particular readers to discuss particular

texts. Where such groups exist prior to contact with the analyst they represent another opportunity to gather data in reasonably naturalistic settings, though the presence of a researcher - even one who does not participate in a session - necessarily means the observer's paradox plays a role in shaping readers' contributions. Some analysts who embark on reading group studies do not intervene in group discussions, while others choose to take a more active role in sessions, directing conversations towards topics they are particularly interested in. (For discussions of various different approaches to assembling and facilitating reading group studies, see Allington 2009; Canning 2017; Norledge 2019; Peplow 2011; Swann and Allington 2009; Whiteley 2011)

Analysts who draw on reading group data typically record and transcribe sessions. This approach allows stylistic analysis of reader responses as well as of texts themselves. Comparing responses with source texts can provide a powerful way of exploring cognitive processes that occur during reading. For example, Norledge (2019) explores the effects of the narrator's use of first person plural pronouns ('we' and 'us') in Adam Marek's short story "Dead Fish", noting that some of her reading group participants felt unable to align themselves with this particular narrative perspective. Similarly, Whiteley (2010) compares the ways in which different reading group participants uses first- and third person pronouns in their discussions of Kazuo Ishiguro's *Remains of the Day*, arguing that the latter demonstrates a deeper level of reader identification with a character. In a study that resonates with my own findings (described in Chapter 6), Canning performs a text-world analysis of reading group participants' responses to Kate Chopin's "The Story of an Hour", and notes how the presence of 'modalised projections' such as 'She's probably just in shock' might be read as evidence of inferences that readers are making about the central character's state of mind (2017: 179).

In recent years, a number of significant studies have explored ways in which the collection and analysis of reading group data can be refined. Bell et al's (2018) study of immersion in digital fiction pioneers what the authors term a 'semi-naturalistic' methodology for reading group studies, in which observers make some attempt to steer conversations but also allow opportunities for unplanned talk. Canning, in her study cited above, notes that most reading group discussion takes

place some time after reading has been completed, and asks group participants to read a short story aloud and respond in real time. This technique offers an interesting alternative to studies in which facilitators do not intervene in group discussions, and works well for the source material under consideration. However, it would be harder to implement for novel-length texts.

One important consideration when analysing reading group data is that group dynamics will play a role in the readings that individual readers report (Peplow et al 2015; Peplow and Whiteley 2021; Steen 1991). Firstly, participants may be more likely to share readings that they believe the group will find acceptable. This can affect responses in a single session, but can also have an impact on group dynamics in the longer term, as established groups evolve to favour like-minded readers. Secondly, readers in groups may arrive at interpretations that they would not have generated on their own. Peplow and Whiteley have documented this latter process, observing a group of readers discussing a poem by Simon Armitage, and arguing that '[t]he readers' movement from a shared lack of understanding to a position of relative enlightenment is a recurring feature of reading group talk' (Peplow and Whiteley 2021: 39). In their discussion, Peplow and Whiteley invoke the concept of 'dialogic reading' to explain such processes:

Interpretations of a [text] are built and shared across the different speakers and their turns. In this way, the meaning, as produced in the group, is intersubjective; that is, meaning is created across multiple speakers, and multiple turns at talk. (Peplow and Whiteley 2021: 33)

Effects such as these do not necessarily render readings less valid. As Steen (1991) has argued, much real-life reading and interpretation takes place in communal contexts. However, as Whiteley emphasises, care must be taken when attempting to link such communally generated readings with cognitive processes undertaken by individual readers:

Social and interactional factors such as self-presentation and group dynamics inevitably shape the reports the participants produce regarding their reading experiences. Therefore participants' reports cannot be regarded as direct reflections of their mental processes as they read. (Whiteley 2011: 33)

While I do not draw on reading group studies in this thesis, the concept of dialogic reading which has been well-documented with respect to reading group studies has the potential to shape reader-response data gathered in other settings too. I discuss this with respect to my own work in the following section.

4.2.3 - Reviews of Contributions to Community-Based Websites

The past few decades have seen a growth in internet-based discussion forums such as Goodreads (<https://www.goodreads.com/>) and LibraryThing (<https://www.librarything.com/>), which encourage readers to review and debate literary texts. Such sites are often open to all, and contributors do not need to undergo the same training that academic critics do. However, the readings encountered on such sites often reveal much about how their authors have engaged with and attempted to comprehend the texts under discussion, and can therefore provide useful counterpoints to criticism published in academic contexts.

One advantage of working with such data is that analysts exert no control over participants, meaning that the reviews on such sites are, to a large extent, representative of more naturalistic reading experiences (see Section 4.2.1). However, it must not be forgotten that responses published on a publicly accessible forum may be subject to the kinds of 'social and interactional factors' discussed in the previous section. For example, in addition to soliciting free-text reviews, many platforms incorporate features which allow other users to rate texts and to respond to other participants' contributions; a factor that is likely to shape the form and content of reader responses. Features such as 'like' buttons may result in particular views, or comments from particular kinds of reviewers, being

overly represented, as group dynamics play a part in the submissions and ratings process. My own study of online reviews (described in more detail below) reveals clear evidence that readers draft their own responses to texts with an awareness of how others may respond. For example, some Goodreads participants began their reviews of Atwood's *The Handmaid's Tale* with claims such as 'Ok, unpopular opinion time' (GRTHT-57) or 'This is going to be a very unpopular opinion' (GRTHT-94), demonstrating an awareness of how other readers' submissions framed their own contributions.

Reader responses on sites such as Goodreads may also be subject to generic conventions that analysts should endeavour to be aware of during analysis. For example, most book review websites operate under an assumption that reviewers will not give away important plot twists or story endings (or, at the very least, that they will flag such features with warnings about 'spoilers'). Care must therefore be taken when attempting to draw conclusions based on the presence or absence of discussions of particular scenes in reader summaries. I discuss this point further, with relation to my own reader-response studies, in the chapters that follow.

Online forums attract reviews from a wider variety of readers than can be found in professional publications. However, quantifying the demographic make-up of such respondents is tricky. While some participants may offer demographic data about themselves, there is nothing to prevent users making false claims about their background, or from posting anonymously, and no way for analysts to verify the backgrounds of those respondents who do supply information. For these reasons, analysts rarely attempt to draw conclusions about how such demographic variables affect contributions.

One advantage of drawing on such data sets is that it is possible to collect data from a large number of participants with relatively little effort, introducing the possibility of complementing the discussion of individual readings with quantitative analyses. This principle is demonstrated by Gavins' (2013) analysis of how participants 'tag' novels, in which she investigates readers' categorisation judgements by exploring which texts they judge to merit the label 'absurd'. Her work draws on tags generated by more than 500 users; a sample size that would be hard to obtain using face-to-face

methodologies. In my own study of Goodreads participants (introduced in Chapter 4, and discussed in depth in Chapter 6), I have attempted to explore other ways in which quantitative approaches can be taken to the analysis of data from such sources.

Further examples of studies which draw on discussions in online forums can be found in Bray (2021); Giovanelli (2018); Mansworth (2020); Nuttall (2015, 2017) and Whiteley (2016).

4.2.4 - Questionnaire-Based Studies

Questionnaire-based studies are a core tool for psychological research (for introductions see Loewenthal and Lewis 2018; Spector 2013; van Peer et al 2014). They have the advantage that they can be completed remotely without an analyst present, making it easier for researchers to boost the number and diversity of participants in a study. When used to seek closed answers (for example, by including 'Likert-scale' style responses such as 'agree a lot', 'agree a little' and so on) they can quickly generate large data sets on which it is possible to perform statistical analyses. In literary studies, asking participants to provide quantitative responses about factors such as the degree to which they enjoyed a text can provide crude but valuable measures against which other aspects of reading experiences can be correlated.

The possibilities of using this approach to generate large data sets has been demonstrated by a recent study of 13,782 Dutch readers which found correlations between a text's genre and participants' likelihood of judging that text to be of high literary merit (Koolen et al, 2020). By collecting demographic data such as age, gender or level of education, and by collecting a sufficiently large sample of participants, the authors were able to explore the extent to which different groups of respondents responded differently to the same texts. For example, they observed that female readers were more likely than men to report having read texts by both male and female authors, but were less likely than men to rate particular novels by female authors highly. The authors also attempted to contextualise their quantitative findings by asking participants to explain their ratings using open verbal responses. They performed a computational analysis of commonly occurring nouns and

adjectives in the resulting corpus of 186,000 words, noting a higher frequency of terms relating to difficulty or complexity in novels regarded as literary, and a higher frequency of words relating to ease or simplicity in those regarded as less literary. Thus, their study was able to detect broad themes that emerged from their sample. However, this methodology did not allow them to explore nuances of individual reading experiences.

Many questionnaire-based studies ask participants to read a short text or textual extract before responding. Dividing participants into groups and showing different groups different versions of a prompt text can be a way of exploring the effects of particular textual features (Miall 2006: 26). For example, Macrae (2016) changed tenses and pronouns in short extracts of literary narration, and found that tense had a more significant effect than grammatical person in shaping patterns of perspective-taking. When splitting participants into groups in this way, care must be taken to avoid the possibility that differing demographic compositions across the different groups introduce bias. Two strategies exist for minimising the risk of this happening: attempting to construct comparable groups by hand, or assigning participants to groups randomly (van Peer et al 2014: 100-1).

With traditional survey-based studies, the advantages of easy administration can be offset by the fact that they will only capture the kinds of responses anticipated in the questionnaire design. One solution to this problem has been explored by Bell et al (2019), who asked participants to complete a Likert-style questionnaire and then used their responses as a prompt in open-ended face-to-face discussions. This methodology resulted in a rich data set, but would be harder to implement with a large sample size.

The ubiquity of questionnaire-based studies in psychology means that a large number of existing measures exist, each of which purports to quantify some meaningful psychological trait which can be established using a standard set of survey questions. One measure of interest to stylisticians is Miall and Kuiken's 'Literary Response' questionnaire. Drawing on previous reader-response studies (such as Kintgen's (1980) studies of real-time responses to poetry), and on the work of Vipond and Hunt described in Section 4.1.2), Miall and Kuiken propose that there are stable differences in reader

disposition that transcend variations in literary genre or reading circumstance (1995: 38). They then describe the development of a questionnaire designed to measure an individual reader's 'orientation' towards a text on seven different dimensions: 'insight', 'empathy', 'imagery vividness', 'leisure escape', 'concern with author', 'story-driven reading' and 'rejection of literary values'. For example, readers who score highly on 'point-driven reading' are claimed to read with greater attention to 'plot or story-line, with particular emphasis on interesting action and compelling conclusions' than those who score less highly (Miall and Kuiken 1995: 42). The authors claim these traits demonstrate a good level of retest reliability, and suggest they may correlate with other measurable personality traits (1995: 49). Miall and Kuiken's measure has attracted the attention of analysts exploring readers' experiences of empathy (Keen 2007; Pager-McClymont and Stradling 2022; Stradling 2022). Significantly, Sadoski and Paivio (2012) have also drawn on Miall and Kuiken's work - and on the authors' argument that different readers may exhibit different tendencies with respect to imagery and empathy - in defending their dual-coding account of comprehension (See Section 2.1.1).

In Chapter 5 of this thesis, I offer a detailed commentary of Harrison and Nuttall's (2020) findings from their survey-based study of the effects of re-reading on reader construals of Margaret Atwood's short story 'The Freeze-Dried Groom'. In Chapter 7, I then present the results of my own survey of participant responses to sections of Atwood's *The Blind Assassin*, which gathered both open and closed reader data, and draws on two measures from Miall and Kuiken's questionnaire.

As I have shown, each of the four methodologies I have discussed in this section has advantages and drawbacks, and each allows analysts to explore different aspects of reader experiences. As I argue throughout this thesis, studies that draw on data gathered using more than one methodology can offer a fuller picture of how readers interpret a text than data from any one methodology alone.

In this thesis, I will present the results of two original reader-response studies, which I will use to support my rationale for proposing an extension to Text World Theory. My first study draws upon reviews of several of Atwood's novels posted to the website Goodreads. As well as providing individual

quotes from reviewers to support the readings I discuss, I explore the extent to which it is possible to obtain a representative sample of reviews and provide quantitative analysis to demonstrate that particular responses to a text are more or less common. I outline the methodology for this study in Section 5.1, and draw on analysis in Chapters 5, 6 and 7. My second study is an original survey of 191 participants who were asked to summarise short excerpts from Atwood's novel *The Blind Assassin*. I introduce this study and discuss the findings in Chapter 7.

5. Margaret Atwood's Fiction: An Introduction

Margaret Atwood is an author whose fame transcends literary circles. She has been described within academia as a 'literary superstar' (Howells 2021: 1) and by the popular press as a 'global phenomenon' (Thomas-Corr 2019). With approximately two million Twitter followers at the time of writing, she is capable of generating instant headlines, yet her reputation has been built on a career spanning more than sixty years. Her bibliography includes seventeen novels, eight volumes of short stories and more than twenty poetry collections, alongside graphic novels, children's stories and a significant body of non-fiction, criticism and autobiographical writing. This vast corpus of work has attracted large quantities of review and criticism from readers within and beyond the academic community, making Atwood an ideal subject for a study grounded in reader-response methodologies.

A comprehensive review of Atwood's oeuvre and resulting criticism is beyond the scope of this thesis. In this chapter, I discuss some significant responses to Atwood's prose fiction, acknowledging that this discussion is inevitably partial and focussed on themes most relevant to my current study. As I do throughout this thesis, I compare readings by professional critics with those from readers writing in non-academic contexts. I therefore begin this chapter by introducing my first reader-response study: an investigation of reviews of Atwood's fiction posted to the Goodreads website. In Section 5.2, I draw on this work as I introduce a range of responses to Atwood's fiction, and here I offer a more detailed justification of why Atwood is a suitable case study for this project. In Section 5.3, I pay close attention to two readings of Atwood's prose by analysts who have taken cognitive approaches to her work. These two case studies demonstrate how cognitive stylistics can provide new perspectives on Atwood's writing. However, I also argue that they draw attention to particular issues that must be addressed if we are to build a complete picture of how readers' mental representations of Atwood's fictional worlds are stored in and retrieved from the long-term memory.

5.1 - Reviewing Atwood: A Reader-Response Study

The Goodreads website (<https://www.goodreads.com>) is a community where users post online book reviews. Responses from Goodreads, and from similar online forums, are used frequently by stylisticians as a source of reader-response data (see, for example, Bray 2021; Giovanelli 2018; Mansworth 2020; Mason 2019; Nuttall 2015, 2017). Typically, analysts identify specific quotes from individual contributors to illustrate that particular readings are arrived at by readers in naturalistic settings. Recently however, Mason has taken a more systematic approach to analysing responses from such sites. Her strategy involves attempting to assemble a representative collection of reviews, and complementing her discussion of individual comments with quantitative observations about the corpus as a whole (Mason 2019: 35-6). This approach has two significant advantages. Firstly, it allows analysts to present evidence about whether specific responses are typical or atypical among a larger sample, and to consider a representative range of responses instead of only those which support pre-existing hypotheses. Secondly, it provides a methodology by which responses from two or more texts can be more meaningfully compared. For these reasons I was keen to build on Mason's methodology, and to establish a protocol that could be used to source comparable corpora for different novels.

On the Goodreads platform, individual novels may receive many thousands of free-text reviews, varying from just a few words to several thousand words in length. Practical constraints would prevent an analyst reviewing every contribution. Doing so would also make it hard to draw comparisons between texts, as some texts receive many more reviews than others. For this reason, I endeavoured to assemble manageable and comparable corpuses of reviews for each text I was interested in.

Goodreads reviewers normally accompany their open reviews with closed 'star' ratings of between 1 and 5 stars. The platform offers no guidance on how to assign star ratings, but there appears to be a consensus among users that stars should be awarded on the basis of a reviewers' judgements of the text's overall quality. Plenty of evidence exists to demonstrate that reviewers take ratings seriously and think carefully before assigning them. The following quotes were gathered from responses to Atwood's novels:

- So why did I award four stars to *The Blind Assassin*? I cannot say that I “really liked it” but it is true that I “really admired it.” (GRTBA-30)
- I had an extremely emotional response to this book. I actually finished it last night but I wanted to think about it a bit before I gave it five stars. The ending almost brought it down a star but after thinking about it more I’ve decided that it is worth the full 5 (GRS-12).
- This is a horrible story. Extremely well written, but unpleasant and harrowing. In fact, I’m torn how to rate it: as a critic, or a reader. (GRS-30)

As well as submitting their own reviews, readers can also comment on and ‘like’ reviews by other readers. Again, no guidance is given on the platform about how users should assign ‘likes’. When piloting my study of Goodreads reviews it was observed that posts that attracted more likes tended to be longer and to contain more nuanced descriptions of specific reading experiences than posts that received fewer likes, and that higher-rated reviews tended to receive more likes than lower-rated reviews. However, no evidence is available to support the idea that a ‘like’ indicates that a reader agrees with the sentiments expressed in a review, so care must be taken when imputing meaning to this metric. Thus, star ratings and likes are both crude measures. However, they do provide opportunities for quantitative analysis.

I assembled a corpus of 100 reviews for each of the texts I wished to analyse, establishing a protocol for deciding which reviews to include, to minimise the possibilities of experimenter bias. The primary consideration was to assemble a corpus containing 20 reviews of each possible star rating, in order to ensure that the widest possible range of responses was represented. As a secondary consideration, the highest ‘liked’ reviews with each star rating were chosen, as this was judged to be a way of identifying longer (and potentially more useful) reviews, again while minimising the chance of introducing experimenter bias. This protocol is similar to that described by Mason (2019) in her study. It is acknowledged that this approach may generate a corpus which does not necessarily reflect

the distribution of reviews on the site (which tended to skew towards higher star ratings, at least for Atwood's texts). However, it has the advantage that, if followed for different texts, it allows comparisons to be drawn between corpora for different texts; a benefit which was judged to outweigh the potential disadvantages. This technique also allows me to make a degree of judgement about the frequency with which particular readings occur. While it is acknowledged that such frequencies may not reflect those of the population as a whole, this methodology can at least provide some indication of whether a particular reading is common or idiosyncratic, and again allows some measure of comparison between different texts.

When selecting reviews using this protocol, a small number of short reviews were rejected as being unsuitable, as they were judged to contain no relevant information about the reader's experience of the text. In such cases, the next-most-liked review with the same star rating was substituted. A high threshold was set for rejecting reviews, as it was acknowledged that even brief reviews could reveal meaningful aspects of a reviewer's reading experience. The following are examples of rejected reviews, quoted in their entirety:

- Uh... yeah
- I read this many years ago

By contrast the following review, quoted in its entirety, was included on the basis that it provided some evidence of the reviewer's experience:

I'll be honest, I really lost track of this one towards the end

Furthermore, a small percentage of reviews included animated gifs alongside textual responses to the novel. It is acknowledged that such contributions have the potential to reveal interesting facets of reader experiences, not least because many encode potential intertextual references (as defined by

Mason 2019). However, a rigorous analysis of these is beyond the scope of this project. For this analysis, animated gifs included within longer contributions were ignored, unless it was judged that the textual contribution was insubstantial compared with the gif, in which case an alternative review of the same star rating was substituted.

When presenting reviews in this thesis, reviewer usernames have been removed. Each response has been assigned a unique identifier:

GRS-[Number] - Response taken from *Surfacing* Goodreads corpus

GRTHT-[Number] - Response taken from *The Handmaid's Tale* Goodreads corpus

GRCE-[Number] - Response taken from *Cat's Eye* Goodreads corpus

GRTBA-[Number] - Response taken from *The Blind Assassin* Goodreads corpus

For ease of reading, typos and errors from readers' original responses are replicated in this thesis without [sic] labels, and unless otherwise specified, quotes included are taken from longer reviews.

In Chapter 6, I present the result of a focussed analysis of responses to Atwood's *Surfacing*. However, the wider data set provided a useful counterpoint to reviews of Atwood's oeuvre published by professional critics in academic contexts. I discuss the similarities and differences between these two kinds of responses in the following section.

5.2 - Responses to Atwood's Fiction

5.2.1 - Canadian Identity

Atwood was born in Ottawa, Canada, in 1939. She published her first poems and prose fictions in the early 1960s, and these were followed in 1972 by a volume of criticism entitled *Survival: A Thematic Guide to Canadian Literature*. Describing her own literary apprenticeship, she has noted that '[n]one of the novelists whose books I had read [...] were alive and living in Canada' (ND:14). In this context, Staines suggests that Atwood's early works represent an attempt to

'forge an identity as a Canadian writer' (2021: 21). Many other critics (including Fiamengo 1999; McWilliams 2009; Nicholson 1994; Wisker 2012; Wright 2012) have identified themes of Canadian identity in her early fiction, and particularly in her second novel *Surfacing*.

While Atwood's work is frequently cited in debates about postcolonialism, many critics are quick to point out that her novels challenge simplistic notions of postcolonial identity (Wright 2012: 212). For example, Fiamengo dismisses readings that draw simple equivalences between the Canadian wilderness and notions of childhood or national innocence, suggesting instead that Atwood's own criticism reveals a desire 'to reject paralysing assumptions of victimhood [that] consign both Canada and woman to positions of outraged innocence or violated purity' (Fiamengo 1999: 145). Atwood's treatment of Canadian identity is thus typical of a narrative style which often seeks both to draw attention to, and to problematise, simplistic binary oppositions.

Questions of national identity are particularly important to *Surfacing*, which I discuss in detail in Chapter 6. 31% of reviewers in my Goodreads *Surfacing* corpus made reference to nationalism, Canadian or American identity in their reviews. For example, one noted 'the thread of Canadian nationalism running through the whole book' (GRS-41), while another identified a focus on 'political/socio-cultural tension between Canada and America' (GRS-13). While academic critics frequently portray Atwood's explorations of national identity as a strength of her writing, these can divide opinion in other contexts. One Goodreads reviewer complained that '[t]he anti-Americanism also gets old' (GRS-95), while a second was even more explicit in their response:

My last problem with this is the blatant American hate. I have read some of my GR [Goodreads] friends complain about the antisemitism of the 19th Century and how they cringe reading it. Some have even laid it aside not being able to tolerate it. I don't see how this is different. (GRS-32)

Staines has suggested that as Atwood's career has progressed, she has 'moved beyond the discovery of "our existence as Canadians"' (2021: 29), and instead focussed on helping to interpret Canada abroad, and to negotiate Canada's relationship with the rest of the world. Yet despite her growing international fame Atwood has not forgotten her roots, with more recent works such as *Alias Grace* (1996) and *The Blind Assassin* (2000) weaving narratives around important moments in the nation's history. In her more recent writing, Atwood's focus on landscapes and the wilderness has become inextricably intertwined with questions about humanity's relationship with the natural world. The idea of the destruction of the wilderness, alluded to in *Surfacing*, is explored more fully in the later Maddaddam Trilogy, in which Atwood displays a more explicit environmental focus (Bouson 2021).

5.2.2 - Literary Archetypes and Narrative Rewritings

While studying in Toronto, Atwood was taught by literary critic Northrop Frye, who is often cited as a significant influence on her work (Howells 2021; Staines 2021; Wisker 2012). Frye is best known for his *Anatomy of Criticism*; a book which Atwood herself admits staying up late into the night to read (Mount 2012: 65). Here, in a seminal essay on the importance of myth, Frye sets out his theories of 'a grammar of literary archetypes' (Frye 1957: 135), suggesting that recurring mythical structures can often be recognised in fictions of all kinds. (Parallels can be seen between Frye's argument and schema theory, as outline in Section 2.2.2). Frye discusses the mythical trope of death and rebirth which he identifies in renaissance comedies such as *Much Ado About Nothing* and novels such as *Bleak House* and *Lorna Doone* (1958: 138). Critics have spotted the same trope occurring in Atwood's *Surfacing*, as I will explore in more detail in Chapter 6.

Atwood's interest in literary archetypes manifests as an urge to incorporate retellings of many different kinds of stories in her fictions. A comprehensive overview is beyond the scope

of this thesis, but representative discussions of her literary reworkings explore mythology and fairytales (Appleton 2008; Ross 1980; Wilson 1993, 2000, 2009), Biblical stories (Filipczac 1993; Ross 1980), Gothic fiction (Bouson 1993), Film Noir (Ramírez 2021), popular romance (Bouson 1993; Tolan 2007) and dystopian fiction (Ketterer 1989; Norledge 2022). Bouson emphasises that Atwood's rewritings always explore alternative versions of culturally sanctioned stories (Bouson 1993: 8). For Wilson, Atwood's self-conscious adoption and adaption of stories that 'get repeated so often in the society that they become definitive' is an empowering strategy, allowing her protagonists to free themselves from the restrictive roles that cultures impose on them (1993: 9 and 298). While Atwood's intertextual play is evident in earlier writings, it becomes an explicit feature of two later novels, *The Penelopiad* (2005) and *Hag-Seed* (2016), in which she offers explicit retellings of Homer's *The Odyssey* and Shakespeare's *The Tempest*. Yet despite her willingness to tackle these pillars of the Western literary canon, her focus has not been restricted to texts which have traditionally been regarded as having high literary merit. Throughout her career she has taken inspiration from so-called 'popular' forms such as crime stories and science fiction. Howells has suggested that this feature of her writing has become a particular focus in later works, such as the short story collection *Stone Mattress* (2014) and *The Heart Goes Last* (2015), describing these works as 'challenging realist conventions as she revisits an array of popular forms' and 'constructing what we might describe as transgressive entertainments' (2017: 1-2).

The liberating potential of such intertextual projects is emphasised by Nischik, who suggests that Atwood's retelling of Homer's *The Odyssey* 'calls into question the time-honored authority of patriarchal classical myths, for instance by giving their female characters a voice [and] empowering them by presenting the events from their perspective' (2020: 261). However, Tolan senses a more ambivalent relationship with pre-existing works in Atwood's writing. Describing *Oryx and Crake* (2003) as 'a Frankensteinian narrative of creators and creations,

reproductions and revisions', she suggests the novel reveals 'a deep ambivalence about the fundamental ethics of borrowing and replicating' (2021: 110).

Atwood's literary rewritings tend to be commented on less frequently by readers reviewing her work in non-academic contexts. However, questions of genre crop up frequently in discussions of her writing. For example, 55% of Goodreads reviewers in my corpus used the words 'dystopia' or 'dystopian' to describe *The Handmaid's Tale* (1985) or its setting. Non-academic readers also frequently make 'intertextual references' when reviewing Atwood's work. For example, one Goodreads reviewer suggested *The Handmaid's Tale* continues in 'the tradition of dystopian classics, such as Orwell's *1984* [sic] and Huxley's *Brave New World*' (GRTH-14). For Mason an intertextual reference is an 'articulated, examinable product' of a 'narrative interrelation', and a narrative interrelation is a 'cognitive act of making a link between a narrative and at least one other' (2019: 21). In Mason's model of intertextuality, intertextual references are evidence of processes that occur during reading, regardless of whether such references are intended by an author or endorsed by 'expert' readers (2019: 3). Thus, even when readers outside the academic community do not read Atwood's novels as part of a strategic project to challenge or rewrite particular stories or archetypes, it is clear that an awareness of similarities with other texts shapes their understanding of her work.

Reviewers in my Goodreads corpus also noted how an awareness of cultural forms often considered less 'literary' pervades Atwood's writing. Commenting on her short story collection *Stone Mattress*, one Goodreads contributor admires her 'love of pulpy, B-movie tropes and plots that Serious Authors are supposed to shun'. In Chapter 6, I discuss the importance of readers' perceptions of genre to their recollections of Atwood's *Surfacing*.

5.2.3 - Feminism and Female Writing

Atwood's first novel *The Edible Woman* (1969) was published only a year after Martha Lear declared the arrival of a second wave of feminism in *The New York Times* (Lear 1968). Wisker

reads this early text as a study of 'society's collusion in roles and narratives for women, which trap them in a male gaze' (2012: 36). Critics have identified similar themes in novels which span Atwood's oeuvre. For example, Ramírez has argued that Atwood's short story 'The Freeze-Dried Groom' (2014) 'unveils gender stereotyping through a typically Gothic film noir male gaze' (2021: 119). Of all Atwood's literary creations, it is perhaps the fictional Republic of Gilead that has attracted the most attention from those who wish to use Atwood's writing as prism through which to explore feminist concerns. Atwood created her dystopian vision in *The Handmaid's Tale* (1985), and revisited it more than thirty years later in *The Testaments* (2019). Van Dam and Polak, in their academic assessment of the works, note how the former text has 'become a well-known shorthand in feminist protest culture', whose presence 'became even more prominent in response to Donald Trump's 2016 election' (2021: 172). The author herself has noted how both novels were inspired by contemporary politics, stating that 'for a long time we were going away from Gilead and then we turned around and started going back towards Gilead, so [the sequel] did seem pertinent' (quoted in Allardice 2019). In this respect, Atwood's interest in gender politics has been a consistent feature of her work.

As a female author for whom '[t]he war of the sexes is a central topic' (Somacarrera 2006: 48), it was perhaps inevitable that Atwood would find herself branded as a feminist writer. However she herself, while not denying the label, has suggested that it 'does not enclose' her (Ingersoll 1992: 139). Nonetheless, her work has frequently been discussed through the lens of gender politics (for example Bouson 1993; Davis 2006; Grace 1994; McCombs 1991; Nischik 2009; Tolan 2007; Wilson 1993).

Staines, reading *Surfacing* (1972) alongside Atwood's book of criticism, *Survival*, published in the same year, suggests that the author's early work explores how victimisation plays a role in her conceptions of both female and Canadian identity (2006; for similar views see Bouson 1993; Grace 1980, 1994). However, critics are quick to point out that Atwood's playful and subversive narratives challenge gender relationships as well as simply documenting them.

For Davis, Atwood's novels frequently portray female bodies as battlegrounds across which 'power structures are written onto female flesh' (2006: 58). She argues that Atwood's frequent images of shape-shifting and disembodiment can signify incarceration and alienation, but can also be empowering, as the narrator of *The Blind Assassin* (2000) discovers when she realises that her 'aging body allows her to indulge in one of her favourite identities as a sinister witch or malevolent fairy godmother' (Davis 2006: 68). Bouson suggests that Atwood constructs feminist reading positions by reworking conventions of familiar genres and revealing their contradictions (1993: 8), but reminds readers that Atwood's heroines fall victim to mothers and female best friends as well as to male lovers and husbands (ix). For Nischik, Atwood's challenges to traditional gender roles are inextricably linked with her experiments in literary genre. She describes Atwood's 'poetics of inversion' in which, for example, male characters are associated with the body and females with the mind, subverting patterns typically seen in more prototypical generic exemplars. Such features, she suggests, become 'a crucial structural principle that engenders a multifaceted interplay between explicit and implicit meaning' in Atwood's writing (Nischik 2009: 8).

Atwood's portrayals of gender conflicts are frequently commented upon by readers reviewing her work in non-academic contexts. In my corpus of 100 reviews of *Surfacing* taken from the Goodreads website, 29 reviewers explicitly remarked on the novel's treatment of feminism, gender or battles between the sexes, with one contributor describing the text as 'a sort of feminist coming of age' (GRS-55), and another claiming that it explored 'social and gender roles that just don't fit and need to be shed like skin' (GRS-8).

5.2.4 - Autobiography and Life Writing

A common topic in academic criticism of Atwood's writing is the relationship between her fiction and her own life story. Grace notes that much of the author's oeuvre has been read as autobiographical - 'much to her chagrin' - and identifies *Lady Oracle*, *The Handmaid's Tale* and

Cat's Eye as three novels that all explore 'an individual woman's attempt to tell her life-story' (1994: 191). Noting parallels between Atwood's own past and that of her protagonist Elaine Risley, Hite suggests that *Cat's Eye* 'raises questions about the relation of the autobiographical "real" to the meaning of a work of literature' (1995: 135). Cooke (1992) cites *Surfacing* as a text which invites comparison with Atwood's own past, while Wisker describes Atwood's short story collection *Moral Disorder* (2006) as a 'semi-fictionalised autobiography', and notes how it returns to themes that are familiar from the author's earlier fictions but 'juxtaposes her motifs in ways that make them seem new' (2012: 169).

One significant feature of Atwood's writing is the author's tendency to revisit particular scenes and images many times, both within and between texts. For example, *Surfacing*, *Cat's Eye* and *Moral Disorder* all feature protagonists who - like Atwood herself - spend much of their childhoods accompanying their father on scientific expeditions into the Canadian wilderness. Similarly, *Surfacing*, *Lady Oracle*, *Cat's Eye* and *The Blind Assassin* all explore the challenges faced by female writers and artists. *Alias Grace*, while less autobiographical in its subject matter, demonstrates how retelling scenes from different perspectives can lead to the same events being construed differently. Harrison's (2023) analysis of the novel pays close attention to linguistic variations between two retellings. This reveals how differences in tense and grammatical structure can foreground or background the actions or perceptions of particular characters and position the narrator differently with respect to the narrated events. In Harrison's reading, these multiple perspectives do not add clarity to the narrative, but 'lead to a progressive obfuscation of details' (2023: 179), and make it harder for readers to resolve the murder mystery at the heart of the novel.

Bouson interprets Atwood's habit of revisiting scenes and themes from a feminist perspective, suggesting that Atwood invokes similar plots and characters time and again because she is concerned with confronting 'basic fears and persisting conflicts that plague women in a male-dominant culture' (1993: 12). Other critics have focussed on how Atwood's

repetitions construct a particular kind of subjectivity. McWilliams suggests that Atwood's focus on authors and artists 'present[s] painting, writing or telling a life story as a crucial medium of reading and rewriting the past' (2009: 113, my emphasis). She also notes how these novels 'draw attention to the process of evasion, subversion and illusion that are at work in all narratives of selfhood' (2009: 113). In her study *Margaret Atwood and the Female Bildungsroman*, McWilliams argues that the author challenges a core tenet of the *bildungsroman* genre, 'replac[ing] conventional narratives of cohesive, singular development, with sometimes outrageous narratives of multiple identity' (2009: 1), while Tolan suggests that *The Blind Assassin*, like Atwood's other novels of the same period, 'remains highly self-conscious of the limits of its own fictionality' (2022: 91).

Though Atwood's interest in the problematic nature of life narratives has remained a constant throughout her career, critics have noticed a progression in her later works, perhaps as an inevitable consequence of her own advancing age. Howells and Tolan have described a 'shift in perspective' in the author's short story collection *Stone Mattress* (2014), with a change in scale 'from the global apocalypse to more local, intimate stories of individuals, many of whom are aging and suddenly faced with their own mortality' (Tolan 2022: 129). In the three 'Alphinland' stories which form part of the *Stone Mattress* collection, and the nine related works that comprise *Moral Disorder* (2006), Atwood uses the device of a short-story cycle to explore the idea of examining a life from different perspectives in time. However, while Atwood's later works frequently document how age can lead to physical limitation and experiences of ageism, Tolan argues they also explore how recent technologies afford opportunities for her elderly protagonists. In this context she notes how 'Alphinland's Constance creates an 'online virtual reality' that provides her 'with the freedom and mobility that are increasingly absent to her in the real world' (2002: 129).

Questions of the problematic relationship between Atwood's fictions and her own biography tend to occupy academic critics - who are more likely to seek out details of Atwood's

own biography - more than they do readers on the Goodreads website. However, some Goodreads participants who have noted similarities between Atwood's past and that of her characters suggest that this lends her writing authenticity:

- This is one of Atwood's most personal books. Her father was indeed an entomologist, and she and her family did live for many years in the woods, isolated from the social rules and hierarchies of city life. It's filled with lots of sensual details - sights, sounds, tastes - that evoke childhood, youth and young adulthood. (GRCE-13)
- And for anyone familiar with Toronto, Atwood provides a very amusing look at how the city has changed: not just geographically but culturally, with every hip pretension and snobby boutique savagely skewered. [...] the way women are treated in the art world - first at school and then professionally - have a documentary-like realism to them. Atwood *knows* this scene. (GRCE-13, emphasis in original)
- But something which is more surprising is the narrator's likeness with the author, obviously not entirely but in some places. Atwood explored the bush with her brother as a child and it reflects in her writing. (GRS-50)

While non-academic commentaries such as this do not tend to foreground complex debates about the mimetic possibilities or impossibilities of fiction, they do raise questions about the extent to which readers are willing to take at face value Atwood's accounts of topics she knows well, such as culture in Toronto, or life in the Canadian wilderness. In Chapter 8, I will discuss the extent to which readers might update their real-world knowledge as a result of their encounters with Atwood's prose, and how this relates to memories of her fictions.

5.2.5 - Language and Form

Atwood's treatment of character and theme is often inextricably linked with her inclination towards formal experimentation. Her fictions exhibit creativity on a range of linguistic levels (as defined by Short 1996), from the lexical deviation of neologisms such as 'econowife' (THT:54) and 'pleeblands' (OC:288), to the complex discourse structures of novels such as *Alias Grace* and *The Blind Assassin*. Atwood's innovative structural designs allow her to explore how the same scenarios can be told from multiple perspectives. Her two earliest novels, *The Edible Woman* and *Surfacing* employ switches of tense and grammatical person which force readers to adopt different deictic centres (Duchan et al 1995) as they read. Later novels introduce switches between different narrators or focalisers, employ embedded or multiply embedded narratives, or juxtapose passages of homodiegetic narration with heterodiegetic extracts from fictional newspapers and magazines to problematise more traditional storytelling conventions.

Academic criticism of Atwood's prose often focusses on how the structures of her fictions contribute to her portrayals of particular kinds of subjectivity. For example, Grace (1980: 89) reads Atwood's switch between homodiegetic and heterodiegetic narration in *The Edible Woman* as evidence of self-alienation (. Such debates often reflect Worthington's notion (1996: 15) that humans are often able to reconceptualise their sense of self by redrafting their own life stories . Yet Staels, who describes *Cat's Eye* as an autobiography 'in form but not in fact', warns readers that they should not 'passively accept the discursive form of Atwood's first person narrators' but instead search for ironic tension between the evaluating protagonist and the structure of the text (1995: 5-6). Invoking Kristeva's notion of the modern polyphonic novel that undermines notions of stable identity, she suggests that Atwood's prose presents subjects in crisis, defined by their multiplicity (1995: 13).

Detailed analysis of an author's language or narrative structure tends to be a hallmark of academic criticism, yet there is plenty of evidence that readers in other contexts read with an awareness of Atwood's linguistic choices. Across my Goodreads corpora, around a third of

contributors (including 31% for *Surfacing*, and 33% for *The Blind Assassin*) explicitly indicated their appreciation of Atwood's writing style:

- Margaret Atwood's gift for storytelling and mastery of language is just intoxicating. (GRS-40)
- The voice of Iris, who narrates much of the story, is so distinct and I loved the language she uses in describing her current life and how she sees the world (GRTBA-39)
- The language was absolutely stunning, with scenes rendered with such poetic language and detail that I felt I was in the scene. (GRCE-39)

Where reviewers did make more explicit connections between language, form and meaning, many echoed arguments that Atwood's linguistic choices reveal important clues about her protagonist's subjective views of the world:

- At first the writing style bothered me with the constant commas and seemingly unending sentences, but as I got into the novel, this style [facilitated] the reader's comprehension of the narrator's stream of consciousness. (GRS-13)
- And of course, the whole structure of the book itself is based around the stories that we tell ourselves about all this. The public ones (the interspersed newspaper clippings), the memories of our day to day lives we might tell a close friend or colleague (the bulk of the conventional prose), and then the stories that we tell in bed to each other that contain our most private truths that we do not tell to anyone (GRTBA-27)

However, in a notable contrast with academic criticism, a significant minority of reviewers (including 13% for *Surfacing*, and 14% for *The Blind Assassin*) expressed frustration at some aspect of Atwood's linguistic choices, suggesting that these detracted from their enjoyment or understanding of the text:

- I'm always immediately turned off by the writing style that Atwood employs here, an abrupt, clipped kind of stream of consciousness prose where run-ons and dropped clauses are the norm, and commas are used where semicolons ought to be. Its ungrammatical nature ensures I have a hard time judging the content of a book with this style. (GRS-72)
- The way that Atwood writes was really off-putting to me [...] Every feeling, every atmospheric description, every dress, every spoken tone must have its metaphor. Every simile you could possibly think of under the sun had its day. It was incredibly distracting. (GRTBA-77)
- One could argue that the endless ugly prose is a reflection of the protagonist's state of mind, but that doesn't make it any more bearable to read. (GRS-25)

Such comments serve as a reminder that the effects of specific linguistic features are not predetermined, and that individual linguistic choices can lead to different interpretations for different readers or in different reading contexts.

5.2.6 - Atwood's Suitability for this Study

Three features of Atwood's prose fiction make her a suitable case study for this project: her subject matter, her stylistic experimentation, and her ability to generate substantial bodies of review and criticism among a wide variety of readers.

As my discussion in the preceding sections has shown, many of Atwood's fictions explore the challenges that her protagonists face when trying to construct coherent narratives from fragmentary experiences and memories. In *Cat's Eye*, the artist Elaine Risley eventually claims to 'see my life entire' (CE: 98). Yet, as McCombs argues, Elaine's artworks, which are described in detail throughout the novel, hint at a more ambivalent subjectivity:

As the narrator warned us, early on, "[t]here is never only one, of anyone": the creative self may retrieve and make visible what the conscious, left-brain self has refused to see; (McCombs 1991: 12)

For Elaine, as for many of Atwood's narrators, a narrative of personal experience is not stable and unchangeable, but something that can constantly be redrafted in the light of new experiences. This notion is re-enforced when Elaine frames her autobiographical testimony by emphasising that '[t]his is the middle of my life' (CE: 13), as if reserving the right to redraft her story again at a later date. *Surfacing*, *The Blind Assassin* and the 'Alphinland' short story sequence - the texts I pay close attention to in this thesis - all feature writers or artists who explore the ways in which life narratives can be redrafted and retold. As I explore in detail in the following chapters, all these texts require their readers to resolve contradictions and ambiguities as they read. Thus, through her protagonists, Atwood dramatizes many of the same strategies her readers must adopt if they are to arrive at coherent representations of the fictional worlds in which her stories are set.

Atwood's interest in narrative ambiguity is inextricably linked with the stylistic choices she makes as a writer. As I noted in Section 5.2.5, her linguistic creativity operates on a wide range of linguistic levels. However, it is her experiments in larger-scale narrative structure that make her work particularly relevant for this project. This is exemplified by her novel *The Blind Assassin*, in which the homodiegetic narration of her protagonist Iris is mixed with passages

from an embedded novel-within-the-novel, and with heterodiegetic newspaper and magazine articles which provide alternative accounts of the events that Iris recounts. This multiplicity of voices presents challenges for readers, who must decide which of several contrasting states of affairs represents the reality of the fictional world projected by the text. As I discuss in more detail in Chapter 7, Dancygier has described *The Blind Assassin* as ‘a thought-provoking laboratory experiment in narrative spaces construction’ (2007: 148), and a text which foregrounds cognitive processes which occur in the comprehension of narratives of all kinds. While *The Blind Assassin* represents a particular interpretive challenge, much of Atwood’s fiction plays with the idea of revisiting and revising established schemata and narrative archetypes, allowing us to examine in detail how textual prompts are combined with readers’ existing knowledge structures when creating mental representations of narratives. Furthermore, Atwood’s habit of creating unreliable narrators (see, for example, McWilliams 2007; Robinson 2006; Staels 1995; Wisker 2012) results in texts which reveal much about how readers draw on partial or unreliable testimonies to create and maintain coherent representations of fictional worlds. Such ambiguities are usually not evident on a sentence-by-sentence level but emerge only when longer units of discourse are considered. For this reason, Text World Theory - which allows rigorous analysis of larger scale discourse structures - is particularly suited to accounting for how readers attempt to understand Atwood’s prose.

Finally, Atwood’s enduring popularity among both academic and non-academic readers means that her work has already generated a substantial amount of responses which can be drawn upon in reader response work. Each of her novels and short story collections can generate dozens of articles by professional critics. They can also result in hundreds of reviews on sites such as Goodreads (See Section 4.2.3), meaning it is possible to assemble corpora containing a wide variety of non-academic responses to her work. As I explore in more detail in the following section, Atwood’s prose has also received attention from analysts who take a cognitive stylistic approach, allowing me to align my findings with those in previous studies.

For these reasons, I continue this chapter by drawing attention to two recent stylistic analyses of Atwood's work, both of which raise important questions for my own study. For reasons of brevity I focus only on two examples here; specifically on studies by Nuttall (2008) and by Harrison and Nuttall (2019, 2020). Further examples of recent cognitive and stylistic approaches to Atwood's writing can be found in Dancygier (2007), Gavin (forthcoming), Harrison (2023) and Norledge (2022).

5.3 - Cognitive Stylistic Approaches to Atwood's Writing

In this section I highlight two recent cognitive-stylistic discussions of Atwood's work. My reasons for focussing on these examples are twofold. Firstly, each provides an elegant demonstration of how such analyses can account for particular readings of Atwood's fiction. Secondly, each also reveals significant clues about what may happen to text-world mental representations as they are stored in and retrieved from the long-term memory.

5.3.1 - Constructing Text-Worlds for *The Handmaid's Tale*

The Handmaid's Tale (1985) is set in the Republic of Gilead; a fictional near-future state in which fertility rates have fallen and young women are compelled to bear children for couples who cannot conceive. The novel is narrated by Offred; a 'handmaid' named after the Commander she is forced to serve. Passages of present-tense homodiegetic narration, in which Offred recounts her life in the Commander's house, are cut with flashbacks describing the period leading up to the formation of Gilead. In the opening chapter of the novel, Offred introduces the image of a *palimpsest* (THT-13) and this metaphor provides a striking image of how she feels her identity is written and rewritten by the events she narrates.

In her reading of *The Handmaid's Tale*, Nuttall (2014) considers the linguistic choices that Atwood makes to convey Offred's experiences of Gilead. Her discussion uses Text World Theory

to augment an analysis grounded in Langacker's theory of Cognitive Grammar (Harrison et al 2014; Langacker 2008). In particular, she focuses on Langacker's distinction between 'summary scanning' and 'sequential scanning'; two different ways in which readers might conceptualise complex scenes comprising several different elements:

Sequential scanning views component states individually and in succession, while *summary scanning* processes components cumulatively, building up to a single gestalt in which all components are conceived as coexistent. (Nuttall 2014: 88, emphasis in original)

Nuttall then proposes that this distinction might inform our understanding of how readers combine individual text-world representations to build larger-scale conceptualisations. She notes that the numerous text-worlds constructed during reading 'interact in large numbers across the breadth of a text' (88), and suggests that typically these interact to form a 'coherent and meaningful whole'. Nuttall then applies this idea to her reading of *The Handmaid's Tale*, suggesting that Atwood's prose makes it hard for readers to achieve such holistic perspectives. As evidence, she cites a number of the author's lengthy compound sentences, for example:

- On the wall above a chair, a picture, framed but with no glass: a print of flowers, blue irises, watercolour
- A bed. Single, mattress medium hard, covered with a flocked white spread.

(Examples from THT, cited by Nuttall 2014: 90)

Nuttall then predicts that this stylistic choice is likely to result in a particular kind of reading experience:

The use of commas (or full stops/colons) invites us to apprehend these details in separate attentional frames [...] disrupt[ing] the reader's holistic conception of this state of affairs through summary scanning. (Nuttall 2014: 92)

My examination of online reviews of the novel reveals that readers do indeed report such reading experiences. Significantly, readers who comment on this feature of the novel tend to do so while expressing frustration at Atwood's prose:

- Almost immediately, I encountered a post-modernist (imagine me doing air quotes) sentence that was so-o long it straddled different time zones [...] there are ten commas, for crying out loud! (GRTHT-14).
- Even so, *The Handmaid's Tale* frustrates me a lot—and not only because it contains run-on sentences and needlessly abandons quotation marks. (GRTHT-2)
- I also found Atwood's writing style to be a bit sloppy and difficult to read at times. The LENGTH of some sentences - she comma splices so much that punctuation seems to lose all meaning. (Goodreads review of *The Handmaid's Tale*, from outside my corpus of 100 reviews).

This evidence clearly supports Nuttall's account, particularly when it comes to sentence level effects.

Nuttall then goes on to suggest that similar processes govern the way that text-worlds are aggregated during the comprehension of larger units of discourse. To illustrate this point, she invokes a passage from mid-way through Atwood's novel, describing it as follows:

[The] mental juxtaposition of mutually exclusive mental spaces [...] reflects the construal of a reality which defies comprehension through summation into a unified conception. This distinctive construal is seen in the presentation of alternative versions of events in richly developed modal-worlds side by side throughout the novel. One prominent example is the three possible fates of Offred's husband Luke, chased by the authorities known as 'the Eyes' in the narrator's recollected past (Nuttall 2014: 94)

It is useful to examine this claim in detail. Prior to the excerpt which Nuttall describes (Atwood 1996: 114-5), Offred and Luke have been separated while trying to escape from the Eyes. Offred herself does not know what has happened to Luke, and wonders about his fate. The passage in question begins with a single sentence paragraph which reads 'Here is what I believe' (THT 114), with the verb 'believe' prompting the reader to conceptualise the affairs described in the following paragraph in an epistemic modal-world. Offred then describes Luke having been shot and killed while trying to escape. Two paragraphs later, Offred then reports 'I also believe that Luke is sitting up, in a rectangle somewhere'. The state of affairs described in this second epistemic modal-world contradicts that in the first, providing an example of two mutually exclusive mental spaces of the kind that Nuttall describes.

As Nuttall identifies, and as Text World Theory explicates, comprehending this passage involves not just creating mental representations of the different states of affairs that Offred describes, but also understanding how these relate to each other in terms of a conceptual structure, and realising that the contents of these epistemic modal-worlds cannot both reflect the state of affairs in the world from which Offred narrates. In her reading, Nuttall describes 'three possible scenarios, described individually, in which Luke is dead, imprisoned or free' (94). She suggests that the reader's inability to identify one of these possible scenarios as more likely than the others reflects 'the failure of an "imposition of structure"', describing the imposition

of structure as 'the perceived asymmetry or graded prominence which would here enable this narrator to make sense of her situation' (2014: 94; see also Langacker 2008: 105). In this respect, Nuttall's analysis provides a convincing account of my own experience of reading *The Handmaid's Tale*, and of being conscious of the fact that I could not choose between several possible accounts of Luke's fate.

However, Nuttall's summary of approximately a thousand words of prose with the phrase 'the three possible fates of Offred's husband' does, I suggest, reveal something interesting about the ways in which readers *are* able to produce simplified aggregations of Atwood's complex text-world structures. A closer reading of Atwood's original text reveals that Offred's testimony creates not just three but upwards of a dozen distinct epistemic modal-worlds. Describing the first scenario in which Luke is dead, Offred suggests that 'Luke is lying face down in a thicket'. As this paragraph continues, however, we observe just the kind of sentence-level effects Nuttall has identified earlier in the novel. Luke's resting place is described as 'a tangle of bracken, the brown fronds from last year under the green ones just unrolled, or ground hemlock perhaps, although it's too early for the red berries' (114). In other words, the narration creates not just a single epistemic modal-world but three competing ones; one in which Luke is lying among bracken, another in which he is lying among hemlock, and a negated world in which he is lying among red berries. Encountering this profusion of alternative scenarios formed an important feature of my own reading experience: for me it re-enforced the sense that the narrator's belief was based on imagination rather than evidence, and also conveyed a sense that the narrator had rehearsed her conflicting beliefs many times. (I imagined, for example, that she would also continue to ponder Luke's fate later in the year when the berries *were* red). We can thus contrast this moment-by-moment reading experience - which I suggest conveys much about the narrator's 'mind style' (Fowler 1977) - with Nuttall's summary which recasts Offred's plethora of competing descriptions as a single scenario in which Luke is dead. This aggregation of 'Luke is dead' worlds is offered alongside two competing

scenarios, in which Luke is imprisoned, and in which he has escaped. Both of these competing scenarios are also presented in Atwood's original text as clusters of competing states of affairs. When Offred imagines Luke in captivity, she describes him looking 'ten years older, twenty' (114), with 'a scar, no, a wound' (115), and wonders whether or not he knows that she is alive. When she imagines him escaping the Eyes she describes him making contact with a resistance who 'must be out there' (115). In my reading the modal verb 'must', which forces readers to conceptualise the resistance in a discrete epistemic modal-world, foregrounds the ideas that Offred understands the opposite possibility is also potentially true in the world from which she narrates.

In other words, while Nuttall notes that we are ultimately unable to decide which one of Luke's fates matches that in the world from which Offred narrates, her reading does, I suggest, reveal that she has engaged in a process of ontological simplification to arrive at her reading. The summary that she provides recasts the dozen or more worlds prompted by the text into a simpler ontological structure in which just three discrete possibilities exist. This process is, I suggest, one that is worthy of further consideration if we are to account for how text-world representations are consolidated in the long-term memory.

5.3.2 - Re-Reading 'The Freeze-Dried Groom'

'The Freeze-Dried Groom' is a short story published as part of Atwood's collection *Stone Mattress: Nine Wicked Tales* (2014). Recounted by a heterodiegetic narrator, the narrative follows counterfeit antiques dealer Sam on the day he is banished from his marital home. Sam attends an auction of abandoned storage units, and purchases a lot within which he discovers all the paraphernalia needed for a wedding celebration, including the desiccated corpse of the groom. When he meets with the former owner of the unit, she admits to killing her fiancé; a revelation which only encourages Sam to prolong his encounter. The narration ends with an enigmatic pronouncement that Sam himself is now missing.

As a short story, 'The Freeze-Dried Groom' affords less opportunity for complex discourse structures and perspective switches of kind offered in Atwood's longer works. Nonetheless, the text remains ambiguous, and provides scope for readers to attribute passages to more than one focalising consciousness. The text has been discussed extensively by Harrison and Nuttall, who have applied principles of Cognitive Grammar to account for their own responses to the text (Harrison and Nuttall, and for the responses of experimental participants (2020). Their analysis draws on Langacker's notion of construal, which specifies ways in which the same state of affairs can be described or conceived differently (Harrison et al 2014; Langacker 2008). They predict that particular words or phrases which attract little attention on a first reading might be given greater significance, and occupy more attentional focus, on a re-reading. In this particular text, they suggest that lexical cues linked to semantic domains such as STORAGE, CLEANLINESS and SMELL are likely to trigger different associations for readers who are already aware of the existence of the eponymous freeze-dried murder victim who appears towards the end of the story (Harrison and Nuttall 2019: 147). The authors then go on to suggest that this shift in perceived significance results in the reader paying less attention to the focaliser and more to the situation that is described when they read the story for a second time: a prediction which they support with evidence in a subsequent reader-response study (2020).

In their detailed analysis of Atwood's text, Harrison and Nuttall draw attention to what they refer to as 'a number of hypothetical text-worlds [...] in which Sam imagines what would happen following his demise' (2019: 141). The following example is typical:

To keep himself under control he slides back into the mind-game he often plays with himself: suppose he was a murder victim, would his toothpaste be a clue? / *judge that this tube was last squeezed twenty-four hours ago. The victim was therefore still alive then.* (SM139, emphasis in original)

In order to comprehend this extract, a reader must create distinct text-world representations of Sam playing his mind-game, and of the scenario which Sam imagines. The phrase 'suppose he was a murder victim', containing a verb of cognition, prompts the creation of an epistemic modal-world, which has a different ontological status to the world which gives rise to it. Embedded within this is a second epistemic modal-world, prompted by the question 'would his toothpaste be a clue?'. In the sentence that follows, which begins '*I judge that this tube was last squeezed...*', the change of deictic centre implied but the introduction of the pronoun 'I', coupled with the switch to an italicised font, means that the text can be interpreted as an instance of free direct speech (Leech and Short 1981: 258), unfolding in the epistemic modal-world representing Sam's fantasy. The speaker in this case clearly cannot be Sam himself, as the world describes a scenario in which he is dead, yet there remains a sense that Sam is thinking these lines. In this sense then, the passage appears to support a dialogic (Bahktin 1981) or dual-voice (Bray 2007) reading.

Harrison and Nuttall elaborate on the effect that this and similar passages have on readers' understanding of what is happening in the world created by Atwood's story:

Through the sudden world-switches triggered in this way, and the off-stage characters they profile, Atwood's story can be seen to complicate readers' conceptualisation of the fictional world and obscure their understanding of the situation presented. Who is speaking at this point? Is this account of events real or imagined? (Harrison and Nuttall 2019: 148)

Harrison and Nuttall expand on this point by suggesting that particular lexical choices and 'formulaic phrases' (2019: 149) may prompt readers to activate schematic knowledge of detective story tropes such as police reports and interrogation scenes, and suggest that on a second reading 'the whole story may be reframed as a police report' (2019: 149). This reading

is not an inevitable interpretation of the text, but the authors support it with evidence from their own reader-response study (2020: 229), suggesting that it is one that a significant percentage of other readers arrive at.

This analysis hints at an important process that may occur during textual interpretation. Text World Theory accounts for the ways in which readers create distinct mental representations of what is happening in the initial text-world and what is happening in worlds associated with characters' beliefs and fantasies. However, by questioning whether specific events are real or imagined, Harrison and Nuttall engage in an active process of wondering whether the events depicted in epistemic modal-worlds reflect those at the same ontological level as the initial text-world. The act of 'reframing' the story as a police report would involve a process of mapping world-building elements and function-advancing propositions from modal-worlds into the initial text-world; a process which is not currently accounted for in Text World Theory. The authors suggest:

[O]n first reading, sections [such as those quoted above] are likely to be interpreted as Sam's own hypothetical imaginings in the present (as a "modal-world" as opposed to a "deictic world-switch" [Gavins 2007]). On re-reading, however, there is an increased likelihood of readers attributing sections of direct speech and thought to that of another character in a future world-switch after Sam's disappearance. (Harrison and Nuttall 2019: 148)

In other words, the authors imply that the text-world conceptual structure prompted by a passage of narrative may not remain static in a reader's long-term memory, but may evolve as readers engage further with a text. Though Harrison and Nuttall's primary aim in their discussion of 'The Freeze-Dried Groom' is to explore the effects of re-reading on textual comprehension, their analysis raises the question of whether such processes might not also occur during a single

reading of a text. Text World Theory already describes processes of ‘world-repair’ (Gavins 2007: 142, and Section 3.3.6), as a result of which erroneously incremented information is subsequently corrected. However, such instances may be specific examples of more general processes by which the ontological statuses of particular states of affairs are continually assessed and reassessed as reading progresses, even when no erroneous incrementation has taken place. As I will explore in more detail in Chapter 7, this question may have particular relevance to narratives in which the same events are narrated from two or more different perspectives over the course of a text.

5.4 - Discussion

In Section 5.1 of this study I introduced my study of Goodreads reviews of Atwood’s fiction, and in Section 5.2 I discussed a range of academic and non-academic responses to Atwood’s work. In Section 5.3 I then demonstrated how cognitive stylistic approaches can prove highly successful in accounting for particular readings of Atwood’s work. I also suggested that both examples I discussed provide clues about how text-worlds may be consolidated in the long-term memory. Discussing Nuttall’s reading of *The Handmaid’s Tale*, I suggested that Nuttall’s reading demonstrated a process of consolidating a complex network of mutually contradictory modal-worlds into a simpler conceptual structure containing just three alternative possible scenarios. Discussing Harrison and Nuttall’s analysis of ‘The Freeze-Dried Groom’, I noted that the authors described a process of reframing information initially conceived in a modal-world as information that could be treated as an accurate description of the matrix text-world. Both these processes offer hints that the conceptual structures that characterise readers’ text-world mental representations in the moment of reading are not static structures but can evolve over time.

In the following two chapters, I offer my own cognitive-stylistic analyses of Atwood’s writing, and draw on my own reader-response data to explore this idea of text-world consolidation in more detail.

6. Case Study 1: Margaret Atwood's *Surfacing*

Surfacing (1972) is Atwood's second published novel. The unnamed narrator describes her return to her childhood home in the Canadian wilderness where she hopes to discover the whereabouts of her missing father. The realist tone established in the opening pages is slowly subverted as the narrator's account of her journey is populated with a series of increasingly outlandish claims, culminating in a description of a dream-like encounter with her dead parents. One way of approaching the novel is to consider it as an example of 'unnatural narrative'; a narrative which 'violates physical laws, logical principles, or standard anthropomorphic limitations of knowledge by representing storytelling scenarios, narrators, characters, temporalities, or spaces that could not exist in the actual world' (Alber 2014). However, as I demonstrate below, instead of reading the novel as unnatural narrative or fantasy, many readers instead interpret the narrator's implausible claims as evidence of mental instability. *Surfacing* therefore provides an interesting case study for this project. Firstly, it raises questions about the different knowledge frameworks and narrative schemata that readers draw on to interpret the unfolding narrative. Secondly, it foregrounds the possibility that the world from which the narrator tells the story is different to the one she describes.

I begin this chapter with a discussion of these themes, exploring how they are reflected in responses to the novel offered in both academic and non-academic contexts. I draw on examples from my corpus of 100 reviews of *Surfacing* taken from the Goodreads website, using the methodology described in Chapter 5. In Section 6.2, I focus more closely on one of these themes, the notion of unreliable narration, and explore how this may lead readers to make inferences about states of affairs in the world from which the narrator narrates. Here, I offer my own Text World Theory analysis of several short passages from the text to demonstrate how the text-world framework may be used to account for some of the readings I identify in Sections 6.1 and 6.2. In Section 6.3, I go on to offer a Text World Theory analysis of 50 precis of the novel taken from my Goodreads corpus. In doing so, I explore the different ways that readers consolidate the text-world mental representations they create in the moment of reading, in an attempt to arrive at a coherent reading of the text. In Section 6.4, I

consider how this analysis informs the hypotheses I advanced in Chapter 3. Given the nature of the Goodreads data, the conclusions I am able to draw from this study alone are limited. However, in keeping with Mason's claim that analyses of online reviews are often suitable for a "framework generating" preliminary study' (2019: 33), I use my findings to inform the design of the survey I report in Chapter 7 of this thesis.

6.1 - Reader Responses to *Surfacing*

In my earlier introduction to Atwood's work (see Chapter 5), I noted how *Surfacing* reflects many of the author's recurring preoccupations, including an exploration of female experience, a challenge to established literary genres and an attempt to forge a distinct Canadian identity. Here I focus more closely on two themes which are also discussed in response to this particular novel; the knowledge structures which readers draw on to interpret the text and the phenomenon of the unreliable narrator.

6.1.1 - Using Schema Knowledge to Interpret *Surfacing*

In Chapter 3, I explained how Text World Theory accounts for the ways in which readers combine linguistic prompts with their own background knowledge to create rich mental representations of discourse. While this occurs frequently during the creation of individual text-worlds, it is also a process that can shape interpretations of longer discourses. This phenomena has already been explored with respect to 'extended metaphors' (also known as 'megametaphors') (Gavins 2007: 151; Werth 1994, 1999: 323). According to Werth:

Most linguistic approaches to metaphor provide sentence-level accounts of the phenomenon. But literary metaphor is frequently discursive: there is an entire metaphorical "undercurrent" running through a whole text, which may manifest itself in

a large number and variety of “single” metaphors. [...] [Text World Theory] captures the conceptual layering inherent in language generally (and not just in metaphor), which treats the “undercurrent” aspect as being equivalent to “gist” or “macrostructure” in text linguistics. (Werth 1994: 79)

For Werth, such ‘undercurrents’ frequently manifest as conceptual metaphors (Lakoff and Johnson 1980a, 1980b) such as DEATH IS SLEEP or NEGATIVE IS DOWN (Werth 1999: 319-20), for which ‘there is no single location where these conclusions are expressed’, but which are ‘cumulative, and, crucially, achieved by way of text and discourse processes, rather than sentence processes’ (Werth 1994: 85). In work which complements Werth’s, Turner has also explored ways in which people are able to interpret one narrative in terms of a second narrative or narrative schema, to produce what terms he terms a ‘double-scope story’ (Fauconnier and Turner 2002; Turner 2003). He suggests that by applying generic ‘concepts like *punishment*, *revenge* and *retribution*’ to specific narrative events, people can find an emergent meaning which ‘does not change the facts of the first scenario, but does change [its] status’ (Turner 2003: 127). For these reasons, it is instructive to explore the specific elements of background knowledge that readers apply when accounting for *Surfacing*’s meaning.

Academic critics of *Surfacing* frequently read the narrator’s physical journey from city to wilderness as a metaphor for personal transformation. Wisker claims that ‘[t]he protagonist’s quest for her own identity is both physical, involving travel, and personal’ (2012: 26), while Staels suggests that the narrator’s search for knowledge develops into a quest for self-knowledge’ (1995). Contributors to the Goodreads website draw similar conclusions. Reviewer GRS-24 describes the novel as being ‘all about a journey, a journey back home, back in time, into the wilderness, into a heart of darkness, confronting memories and past misdemeanours’, while reviewer GRS-9 suggests that for the narrator, ‘returning [home] leads her to reexamine her life’. Such accounts suggest the role that conceptual metaphors play in interpretation, with metaphors such as LIFE IS A JOURNEY, TIME IS SPACE, and

THE SELF IS A LANDSCAPE underpinning interpretations of the text in both academic and non-academic contexts.

In addition to such conceptual metaphors, critics have also noted how Atwood draws on readers' knowledge of other texts and literary conventions; information which can be described as forming story or genre schemas (see Section 2.2.2). In a critical context, Bottez (2017) suggests that the narrator's 'rebirth' can be read in terms of 'the general archetypal pattern of the external/internal journey'. Wilson describes the narrator's flight into the woods and her reversion to an animalistic mode of existence as 'a fairy-tale transformation of sorts' (1993: 11), and notes parallels with Canadian *loup garou* (werewolf) fables (1993: 100). Goodreads contributors also make connections to specific texts and textual genres. In my corpus of 100 reviews, I identified 155 individual 'intertextual references' (Mason 2019 and Section 5.2.2 of this thesis), distributed among 65 reviews. 78 were to other works by Atwood, 41 to other individual texts or authors, and 36 to broader literary genres. Typical examples of the latter included descriptions of the novel as '[p]art detective novel, part psychological thriller' (GRS-54), and '[m]erging the genres of social realism, murder mystery, psychoanalysis and magic realism' (GRS-59).

It is worth noting that while many reviewers note parallels between *Surfacing* and particular genres or narrative archetypes, others use genre-labels as points of contrast. Several academic critics have noted how the protagonist's spiritual rebirth differs from the familiar Christian parable of death and resurrection (Ross 1980, Watanabe 2008). Similarly, one Goodreads reviewer suggested that 'I make it sound like a mystery thriller. It is not' (GRS-14). This finding (which tallies with a study by Mason 2019: 44 and 53) suggests that genre knowledge can be important for understanding how readers conceptualise narratives even when they are spotting differences from familiar patterns rather than similarities. (For a full discussion of the notion of 'disanalogy' in intertextual references see Mason 2019: 53).

In this respect, the Goodreads corpus provides a particularly useful resource. Authors of peer-reviewed publications tend to emphasise examples of schema applications that aid comprehension,

and rarely admit to being confused by a text. Goodreads reviewers, by contrast, are more likely to acknowledge when a text has disappointed or eluded them. Such admissions often reveal how unsuccessful attempts to apply genre frameworks or other schemata can frustrate interpretation or reduce appreciation. The following review was submitted by a contributor who gave *Surfacing* a rating of just two stars out of five:

In *The Evil Dead* these kids go and stay in a remote cabin out in the woods and they release evil spirits that want to kill them etc. In *Cabin Fever* these kids go and stay in a remote cabin out in the woods and catch a flesh eating disease and die and go mad, etc. In *The Cabin in the Woods* these kids go and stay in a remote cabin way out in the woods where a zombie army tries to kill them etc. Now these are movies but in *Surfacing*, which is a book, these kids go and stay in a remote cabin out in the woods but the big difference is there are no zombies and flesh eating bugs and evil spirits at all all though are they [sic]. It is a profound question. (GRS-7)

This reader went on to express disappointment that the text failed to deliver the tropes of horror narratives they were expecting. In this context, Bruner's claim that 'to be worth telling, a tale must be about how an implicit canonical script has been breached, violated, or deviated from' (1991: 11, for discussion see Herman 2009: 19) may be significant. These examples suggest that readers' long-term global mental representations of narratives may be influenced by top-down schema applications (Bruner 1991: 11) as well as by bottom-up amalgamations of individual text-world representations. I explore this notion more fully in Section 6.3.2.

The decision about whether or not to read the narrator's outlandish claims as literally true - and thus to approach the novel as an example of a horror or fantasy narrative rather than as an account of mental instability - is a 'profound question' with which other Goodreads reviewers wrestled. One contributor claimed that 'it's not always clear at first whether she's talking literally or

metaphorically' (GRS-5), while another suggested that 'the reader has some freedom to determine what is true and what is paranoia' (GRS-81). The fact that many readers do not take the narrator literally raises a question about the extent to which we should treat the text as an example of unreliable narration.

6.1.2 - Identifying Unreliable Narration in *Surfacing*

The phenomenon of unreliable narration is one that has been studied extensively from a literary critical and narratological perspective. The term 'unreliable narrator' was introduced by Booth, who suggested that when a narrator is 'discovered to be untrustworthy, then the total effect of the work he [or she] relays to us is transformed' (1961: 158). As I discussed in Chapter 3 however, ascertaining whether a homodiegetic narrator is unreliable is complicated by the fact that a reader has no access to any 'truth' about a fictional world other than through the narrator's testimony. Booth's account offers one resolution to this dilemma, through his suggestion that we might call a narrator reliable only 'when he [or she] speaks for or acts in accordance with the norms of the work (which is to say the implied author's norms)' (1961: 158). Booth's model has since been adapted by Rabinowitz (1977), who reframes the notion of unreliable narration as a disparity between the 'narratorial audience' (the notional figure in the world of the fiction to whom the narrator addresses themselves and with whom the 'real audience' is invited to identify), and the 'ideal narrative audience' to whom the narrator wishes they were speaking. It has also been expanded by Phelan (2005, 2017), who offers a typology of different kinds of unreliable narrators, including those who report less than they know, those who misreport, and those who misinterpret the events they witness.

A full discussion of the relative merits of these frameworks is beyond the scope of this thesis. For the purposes of this investigation, however, I wish to distinguish three types of statement made by an unreliable narrator. The first of these is what Phelan terms 'misreporting'; an unreliability 'on the axis of characters, facts, and events' (2005: 51). In such cases, a narrator makes a statement which the reader judges to be factually untrue in the world of story; the equivalent of a (deliberate or

inadvertent) lie. An example of misreporting occurs in *Surfacing* when the narrator claims that her friend Anna has tears on her cheeks, then subsequently reveals that what she thought was tears were in fact drizzle (S25). In a Text World Theory account of comprehension, this latter revelation prompts the reader to engage in a process of 'world-repair' (Gavins 2007: 142 and Section 3.3.6).

A second type of unreliable statement corresponds to Phelan's category of 'misinterpreting', in which a character correctly reports a personal belief about the world of the story that the reader judges to be mistaken. Again, *Surfacing* provides us with an example, when the narrator informs readers that 'I believe that an unborn baby has its eyes open and can look out through the walls of the mother's stomach, like a frog in a jar' (S26). In this case, the reader may judge that the narrator's belief, conceptualised as a state of affairs in an epistemic modal-world, does not correspond to the state of affairs in the world from which they are narrating.

A third type of unreliability occurs when a narrator makes a statement that is never judged by the reader to be untrue in the world of the story, but which creates an opportunity for the reader to make an incorrect inference. This can occur when, in Phelan's terminology, narrators are guilty of 'underreporting', or selectively reporting information in a way which encourages the reader to jump to false conclusions. Such mistaken inferences may go unnoticed during a first reading, until a later revelation prompts a moment of world-repair. I discuss an example of this in Section 6.2.2 below. Narratorial statements that prompt instances of world-repair and narratorial beliefs that readers judge to be untrue both have implications for how the mental representations that readers form in the moment-by-moment experience of reading are consolidated in the longer term. (For a discussion of this phenomenon with respect to absurdist literature, see Gavins 2013).

The notion of unreliable narration is one that is invoked frequently in discussions of *Surfacing*. For Clark, writing in an academic context, Atwood creates a distinctive narrative style by 'constantly presenting so-called facts and subsequently subverting and exposing them as fiction' (1983: 3). Bouson suggests that the narrator's 'seeming "realistic" and initially convincing story' is revealed to be 'pure fabrication', meaning 'what has appeared to be narrative "truth" is exposed as an elaborate fictional

construct' (1993: 41). This sentiment is echoed frequently in my Goodreads corpus, with one reviewer suggesting that 'everything the woman has told us at the start of the story is revealed to be a lie' (GRS-48), and another claiming that the narrator's 'grasp on reality is oneiric and muddied' (GRS-3). In all, 17 of the 100 reviews in my Goodreads corpus included some indication that they found the narrator's testimony to be unreliable. This finding must of course be qualified: we cannot conclude that the remaining 83 reviewers believed the narrator to be trustworthy simply because they failed to mention her unreliability in their discussion.

In *Surfacing*, questions of the narrator's reliability intersect directly with questions of genre. In fantasy fiction, authors frequently create texts in which bodily metamorphoses and ghostly encounters are permitted according to the rules of the fictional universe. However, many readers interpret the outlandish claims in *Surfacing* not as evidence that Atwood's fictional universe obeys different laws, but rather that the narrator is speaking metaphorically or undergoing some form of psychological breakdown. 26 of the 100 reviewers in the Goodreads corpus explicitly used the word 'madness' to describe the protagonist, or indicated in some other way that she was psychologically unstable. While many reviewers stated the breakdown as a fact, others suggested that the reader had some freedom to choose how to interpret the narrative, with one suggesting that '[t]he protagonist's madness offers nice opportunities for strategic ambiguity - i.e. the reader has some freedom to determine what is true and what is paranoia' (GRS-81).

Such readings raise an issue that is important to this study. If a reader does decide to treat a narrator's testimony as unreliable, this is likely to affect the representation that they form of the world in which the narrator resides and from which the act of narration takes place, even though they have no direct access to information about this world other than through the narrator's testimony. To explore this idea further, I will now reflect on how Text World Theory may help analysts account for some of the judgements that readers make about the narrator's reliability when reading *Surfacing*.

6.2 - Unreliable Narration in *Surfacing*: A Text World Theory Analysis

In this section, I explore how a text-world analysis of *Surfacing* can account for the fact that many readers of the novel find the narrator to be unreliable. My analysis demonstrates how Text World Theory can generate accounts of textual comprehension that have a high degree of explanatory power. However, it also draws attention to ways in which conceptual structures created during the moment-by-moment experience of reading may be updated and consolidated as reading progresses.

6.2.1 - *Surfacing* Chapter 1: Building and Updating Text-Worlds

Surfacing opens as follows:

I can't believe I'm on this road again, twisting along past the lake where the white birches are dying, the disease is spreading up from the south, and I notice they now have sea-planes for hire. But this is still near the city limits [...] (S1)

As a homodiegetic narrative, the text invites readers to create a representation of an initial text-world in which the narrator resides and from which the act of narration takes place. This world is described in Text World Theory as an 'empty text-world' (Gavins 2007: 142 and Section 3.3.5). The claims made by the narrator then prompt the creation of subsequent epistemic modal-worlds. This state of affairs is true for any homodiegetic narrative, and in many cases such empty text-worlds may fade quickly from awareness, allowing the reader to treat the epistemic modal-worlds created by the narration as if they were equivalent to the initial text-world (Gavins 2007: 133). However, this opening passage from *Surfacing* is notable for the way in which it draws attention to the ontological status of the narrator's testimony. The verb 'notice' in the first sentence reminds readers that the description of the landscape is filtered through the narrator's consciousness. The opening clause 'I can't believe', which prompts the creation of a negated epistemic modal-world, has a more subtle effect. When I read this line, my attention was drawn to the subjective nature of the following description, and to

the possibility of differences between the initial text-world containing the narrator and the state of affairs which the narrator describes. Yet despite this conceptual structure, there is nothing outlandish or implausible in this opening description, and the scenario which the narrator describes is commonplace. Only the pattern of epistemic modality - an example of what Simpson (1993) would term 'negative modal shading' - primes the reader to be alert for discrepancies in the narrative that follows. As the chapter progresses, negated epistemic modal-worlds are a recurring feature, prompted by clauses such as 'I never thought of it as...', 'it doesn't seem right', and 'which probably isn't true' (S1-2); stylistic choices which may also serve to remind readers of the narrator's potential unreliability.

There is another feature of Atwood's prose which may prime readers to pay attention to the relationship between the worlds created by the narrative and the world from which narration takes place. The following passage occurs a few paragraphs into the novel:

I'm in the back seat with the packsacks; this one, Joe, is sitting beside me chewing gum and holding my hand, they both pass the time. I examine the hand: the palm is broad, the short fingers tighten and relax, fiddling with my gold ring, turning it, it's a reflex of his. He has peasant hands, I have peasant feet, Anna told us that. (S2)

This passage begins with the narrator giving a simple description of the world from which she is narrating. Unlike the earlier extract there are no epistemic qualifiers, but as with 'I notice', the phrase 'I examine' reminds the reader that their view of the world is filtered through the narrator's awareness. However, the tone of the passage changes with the sentence which begins 'He has peasant hands...'. The use of the adjective 'peasant' to describe body parts conveys a subjective impression, rather than a proposition that can be assigned a true or false value. Short (1996: 265) describes such terms as 'value-laden expressions', and notes that these can be a key marker of point-of-view in prose fiction. The reader is initially likely to assume that the impression conveyed here is the narrator's. However, the subsequent qualifier, 'Anna told us that', requires the reader to engage in a process of world-repair,

relocating this subjective impression in an epistemic modal-world associated with Anna's testimony. The use of the distal 'that' rather than the proximal 'this' may also serve to distance the narrator from this impression. This need to re-evaluate the source of the subjective description can make for a jarring experience. In my own reading, it created a sense that the narrator might have trouble separating her own beliefs from the opinions of those around her, as she struggled to remember the original source of the value-laden description.

This may not be the only instance of world-repair that readers engage in as they read this passage. The paragraph contains the first reference in the text to the character Joe, who we meet 'holding my hand' and 'fiddling with my gold ring'. In my first reading of *Surfacing*, these phrases prompted me to imagine a romantic relationship, activating a ROMANTIC RELATIONSHIP schema during comprehension. As a result, I made the inference that Joe and the narrator were married or engaged, supplementing the narrator's linguistic cues with my own background knowledge. This inference was one I made automatically, and the status of the relationship was not necessarily foregrounded during my initial reading experience. However, when the narrator subsequently reveals that the ring was not in fact a gift from Joe, but is only worn because 'it's useful for landladies' (S17), I found myself consciously re-evaluating my earlier assumption and performing an act of world-repair. This example, which involved me making an initial incorrect inference, fits neatly into Phelan's description of narrative underreporting, which he cites as a clear marker of unreliability. While passages such as these may not be judged to contain specific untruths, they may go a long way towards creating the sense that 'everything the woman has told us at the start of the story is revealed to be a lie' cited earlier from the Goodreads Corpus. Statements which prompt the reader to engage in similar moments of world-repair occur frequently throughout *Surfacing*, and as such might be said to form a significant element of the narrator's 'mind style' (Fowler 1977). I will argue later in this thesis that they may also provide a distinctive feature of Atwood's authorial style.

The analysis I have presented in this section, linking specific textual features to particular readings of Atwood's prose, provides an example of how Text World Theory can allow analysts to posit

plausible explanations for why readers interpret *Surfacing* as they do. My analysis, based on a single text, does not constitute proof of a causal connection between the stylistic features I have identified and the responses I have discussed. However, this connection could be explored further by comparing responses to texts with similar linguistic features.

6.2.2 - Unreliable Narration and the Initial Text-World

In section 6.2.2 I suggested that particular features of Atwood's prose prime readers to be aware of potential discrepancies between states of affairs in the epistemic modal-worlds prompted by her narrator's testimony, and the state of affairs in the world from which she narrates. I now explore in more detail how readers conceive of this initial text-world.

I begin by considering again the opening lines of the novel, quoted in section 6.2.2 above. The first sentence prompts the creation of two separate epistemic modal-worlds. The first is a negated epistemic modal-world prompted by the verb of cognition in the clause 'I can't believe'. This world is populated by an enactor of the narrator who is positioned 'on this road', a lake, and dying white birches. In my own reading I drew on background knowledge, amalgamated from my own experience of road trips, to add details to my own mental representation of this state of affairs. Thus, I inferred that if the narrator was 'on this road' she was likely to be located in a vehicle of some description, and likely to be in the process of making a journey.

A second epistemic modal-world is prompted by the verb of perception in the clause 'I notice', and this world is populated with sea-planes. Text World Theory predicts that the two worlds constructed by this description are distinct, and that both have a different ontological status to that of the initial text-world. However, two pieces of evidence suggest that some process of consolidation subsequently takes place. The first of these comes from my recollection of reading the scene. When I first read the text, I experienced a vivid mental picture of sea-planes floating on a lake with birch trees in the background: an experience which implies that I had combined world-building elements from discrete text-worlds into a single mental representation. The second piece of evidence comes from

analysing reader summaries of *Surfacing* taken from my Goodreads corpus. While many reviewers doubted the veracity of many of the narrator's statements (as I explore in more detail below), none questioned the factuality of her initial claim to have embarked on a journey. Text World Theory claims that in cases of homodiegetic narration, the initial text-world can often be treated as an empty text-world (see Section 3.3.5). However, it may be that in cases of unreliable narration, it may be necessary to explore in more detail how readers decide that some - but not all - of the information presented in modal-worlds can be taken as an accurate description of the world from which the narrator narrates.

This point is illustrated by a passage that occurs later in the novel. A key plot running through *Surfacing* is the narrator's quest to discover what happened to her missing father. After several days of fruitless searching, she and her friends receive a visit from the police. The police do not speak to narrator, but to her friend David, while the narrator watches them 'talking in low voices' (S150). The narrator then reports:

Then I saw David hurrying, taking the hill steps two at a time. The screen door banged shut behind him. "They found your father," he said, breathing hard from the climb. He squinted his face, as if to show sympathy.

The door slammed again, it was Anna; he put his arm around her and they both studied me with the intent pounding look they'd had at supper.

"Oh," I said. "Where?"

"Some American guys found him in the lake. They were fishing, they hooked him by mistake; the body was unrecognisable but an old guy named Paul something-or-other down there, says he knows you, he identified the clothes. They figured he'd fallen off a cliff or something, he had a skull fracture." Seedy department store magician, producing my father out of nowhere like a stuffed rabbit out of a hat.

"Where?" I said again.

"It's awful," Anna said. "I'm really sorry."

“They don’t know where it happened,” David said, “he must’ve drifted; he had a camera round his neck, big one, they think the weight kept him down or he would’ve been found sooner.” His eyes gloating.

It was clever of him to have guessed the missing camera, since I’d told them nothing. He must have thought quickly in order to make it all up in such a short time: I knew it was a lie, he was doing it to get back at me. (S151)

Here the narrator recounts how David brings news of the narrator’s father’s death. The claim that ‘Some American guys found him in the lake’ is presented within a text-world created by David’s direct speech. This has a different ontological status to that of the narrator’s own testimony, since the world created by David’s testimony is enactor-accessible rather than participant-accessible (see Section 3.3.4). The narrator then implies that David is lying, with her testimony creating a deontic modal-world in which ‘he must have thought quickly in order to make it all up in such a short time’. Comprehending this scene involves understanding that these two worlds are mutually incompatible, and that they cannot both provide an accurate description of the initial text-world from which the narrator is narrating.

Text World Theory allows us to plot the conceptual structure prompted by this passage, but currently provides no mechanism to account for how readers build representations of states of affairs in the world from which a homodiegetic narrator narrates. However, determining what is ‘really’ happening in this world will be, I suggest, a key motivation for many readers. In my first reading of the text, I felt convinced that the narrator was mistaken, and that David’s version of events matched those in the initial text-world. Evidence that this is not an entirely idiosyncratic interpretation is provided by the following Goodreads contributor:

The driving force behind this road trip to a remote Quebec lake is a young woman who grew up there but had left to be her own person, and her testimony is less than reliable.

Basics seem to include the physical truth that her father who lived there is missing. This does seem to be real since some American fishermen find his body. (GRS-44)

This reading is notable for three reasons. Firstly, the reviewer has taken the state of affairs presented within the ontologically discrete world prompted by David's testimony and offered it as an accurate description of the initial text-world, with no acknowledgement of the circumstances in which the original claim was made. Secondly, in doing so, they have trusted David's version of events over the narrator's. (In Rabinowitz's terminology, the reviewer has refused to adopt the role of 'ideal narrative audience' to whom the narrator wishes she was speaking: another hallmark of unreliable narration). Thirdly, the narrator's report contains the qualifying clause '[t]his does seem to be real', which implies that they are keeping track of their own level of certainty about the deductions they are making about the text-world in which the narrator resides. This report, then, provides another suggestion that processes of consolidation may be taking place as the initial conceptual structure promoted by the text is remembered and recalled.

To explore such consolidation processes further, I embarked on a more systematic study of the 100 reviews in my Goodreads corpus, in search of evidence that other reviewers were engaging in similar consolidation processes. I present the results of this study in the following section.

6.3 - Building Consolidated Mental Representations of *Surfacing*: A Reader-Response Study

In this section I present the results of a systematic analysis of my corpus of *Surfacing* reviews. The 100 reviews in my corpus varied substantially in length, content and tone, with many reviewers engaged in both summarising particular events from the novel and describing their own reactions to the text. However, many of the participants included within their reviews a discrete summary of the novel's premise (which I will refer to hereafter as a 'precis'). I begin this section by discussing the features of

these precis and explain my justifications for singling them out for particular attention in the analysis that follows. In the remainder of Section 6.3 I present a text-world analysis of these precis, and discuss how they may provide evidence of consolidation processes that readers embark upon subsequent to reading.

6.3.1 - Identifying Reader Precis of Surfacing

An initial survey of my Goodreads corpus revealed that a significant number of reviews contained similar summaries of what reviewers presented as the novel's central premise. The following two extracts are offered as indicative examples:

- Our unnamed female narrator brings her lover and their two (married) friends to her childhood lakeside cabin in the woods for a brief getaway from life and for the two men to capture some footage for the amateur film they are producing. She hides her true intentions of returning to this familiar lake however. She is trying to find her father. Long missing, our narrator does not presume him dead but instead believes that he is still alive and living by the lake. (GRS-3)
- The story starts out very simply with an unnamed woman who returns to her family home, a cabin in the wilderness of Quebec, Canada. This is not a happy homecoming as she had left home years earlier and has not spoken to anyone in her family since. There is the added layer of her reason for going back. She is hoping to find clues to her father's mysterious disappearance. She is accompanied by her partner, Joe, and a married couple, Anna and David. (GRS-16)

The degree of similarity between these passages is, I suggest, important. They clearly share many common features. For example, both open with a description of the narrator visiting a cabin, and both go on to cite a reason for her journey. However, the passages are not identical, and suggest a

significant degree of independent creative effort on the part of each reviewer. The fact that common semantic meanings (Jakendoff 1983) can be identified means that stylistic similarities and differences between the passages may be meaningfully compared.

Having noted many similar precis in the corpus, I attempted to define a set of objective criteria by which such passages could be isolated from longer reviews. Ultimately, I was not able to define a single set of necessary and sufficient conditions for identifying such precis. Instead, I decided upon a working definition. To qualify as a precis, a passage had to describe one or more events or states of affairs in the fictional world which I judged had been included by the reader primarily because they believed them to be of key significance to the narrative. This involved a degree of subjective judgement on my part, but allowed me to identify a usable sub-corpus of such passages. These passages were frequently marked by one or more of the following features:

- They occurred as discrete descriptions of events at the text-world level, sandwiched between descriptions of events at the discourse world level, as in the following example:

- *The ending almost brought it down a star but after thinking about it more I've decided that it is worth the full 5.*

[Precis begins] The story starts out with an unnamed narrator who is on a trip to a remote cabin [...] our narrator comes face to face with her own demons and it's not a pretty picture. [Precis ends]

I'm so glad that I read this and I definitely need more Margaret Atwood in my life. (GRS-12 - my italics)

- They were separated from earlier and later parts of the review by paragraph breaks.
- They were explicitly labelled as summaries or similar by the reviewers, as in the following examples:

- For the benefit of future readers, here is my summary (GRS-14)
- What's it about? Hah. That's a fantastic question. I'll attempt to answer...

(GRS-4)

Across the sample of 100 reviews I identified exactly 50 passages which I judged to count as precis. Of these, I was able to determine clear start and end points for 48 of these using one or more of the three criteria above. In the other two cases I was forced to make a more subjective judgement about where the precis began or ended. Thus, while acknowledging that such a selection process is not entirely free from subjective judgement it does, I suggest, meet a reasonable standard of reproducibility, and could be used to assemble comparable data sets for different texts.

Working with this entire sub-corpus provides a considerable advantage over selecting and analysing individual quotes. As well as demonstrating that particular readings are possible in principle, it also allows a degree of quantitative analysis, enabling me to identify consolidation strategies that are adopted by significant percentages of readers. However, it must be remembered that the particular circumstances under which these precis were gathered also shapes their form and content. The following caveats are noted. Firstly, precis on the Goodreads website are not offered as comprehensive recollections of the novel they describe. One reason for this is the commonly accepted rule that such reviews should not normally contain 'spoilers' which reveal narrative endings or significant plot twists. While the inclusion of a particular feature in a precis is evidence that a reader has remembered this aspect of the text, we cannot conclude that details missing from such precis are also missing from the mental representations of the text stored in a reviewer's long-term memory.

This first point reflects a wider truth that such precis are produced as a result of multiple cognitive processes, including a period of conscious selection and crafting after information about the text has been retrieved from long-term memory. While features of a precis may indicate that particular cognitive processes have taken place, precis do not represent a reviewer's 'definitive' account of the

source text. It is likely that each reviewer would have been able to produce a different summary of the text under different circumstances.

Finally, it is noted that the reduction of the original corpus to a subset of contributions from reviewers who have foregrounded descriptions of plot in their reviews may introduce a bias towards readers who adopt particular reading strategies; for example those who engage in ‘story driven reading’ rather than those who seek ‘empathy’ or ‘imagery vividness’ (Miall and Kuiken 1995). Of course, it is also the case that the subset of readers who contribute reviews to Goodreads is not necessarily representative of the population as a whole. However, I suggest that this methodology does at least allow *some* degree of quantitative judgement about the frequency of particular readings or consolidation strategies. At the very least, it should allow distinctions to be drawn between idiosyncratic behaviours, and behaviours that are adopted by a significant percentage of reviewers.

These caveats limit the extent to which conclusions from this study can be extrapolated. This notwithstanding, careful analysis of this sub-corpus provides one way in which the hypotheses proposed in Section 3.5.2 can be investigated. The results of this analysis will be compared with that from data gathered under different circumstances in the following chapter.

6.3.2 - Reader Precis of *Surfacing*: An Analysis

In this section I present the results of a stylistic comparison of the 50 reader precis of *Surfacing* in my Goodreads sub-corpus, and discuss what a text-world analysis can reveal about the processes of consolidation that readers undergo as they read and later recall the text.

6.3.2.1 - Content

The precis in the Goodreads sub-corpus varied between 12 and 373 words in length, with an average length of 79 words. Writing a precis of several dozen words of a novel some several tens of thousands of words in length requires reviewers to be highly selective about what information they report. A full discussion of how we might parse such precis in a rigorous way to determine their ‘semantic content’

(Jackendoff 1983) is beyond the scope of this thesis. However, even a crude analysis reveals a high degree of similarity in what reviewers chose to include. 24 of the 50 precis (48%) opened with a sentence that began with a noun phrase identifying the narrator and placing her in the subject position. In addition, several other world-building elements and function-advancing propositions occurred frequently across the submissions:

- 45 reviewers (90%) reported that the narrator made a journey
- 44 reviewers (88%) reported that the narrator was in the company of friends
- 42 reviewers (84%) reported that the narrator's father had gone missing
- 31 reviewers (62%) reported that the narrator was returning to her childhood home

By contrast, only two reviewers (4%) made reference to the narrator's brother in their precis, and only one (2%) to her mother, despite references to both characters on the first page of the novel and frequently throughout. The contrast between this and references to the narrator's father therefore feels significant. One possible explanation for this discrepancy is that the father's disappearance fits the 'detective story' schema that many reviewers suggested could be applied to the text. The high incidence of certain features in this data also appears to support Emmott's suggestion that there may be a core of narrative information that most readers consider essential to understanding a narrative:

Presumably, there is a certain minimum threshold of information which the average reader might be expected to retain, such as key facts about the major characters and the locus of a particular stretch of action. (Emmott 1997: 7)

Despite the similarities between the precis in my corpus however, a significant minority of readers reported events that the majority of reviewers failed to mention. For comparison, I include the following short precis, which included none of the most commonly recurring plot elements:

[A] woman who turns into an animal living on a remote island. (GRS-56)

While this summary stood out within the corpus, it is far from an idiosyncratic reading of the novel, echoing as it does the ‘fairy-tale transformation of sorts’ that critics such as Wilson (1993: 11) have noted as an important feature of the text. The presence of atypical precis such as this reflects the fact that summarising a complex narrative is not a deterministic process, and that individual backgrounds and dispositions will ensure that different readers focus on different elements of the text.

6.3.2.2 - Grammatical person and empty text-worlds

Surfacing is a homodiegetic narrative, yet all 50 respondents who included a precis in their review transposed the first person account offered in Atwood’s text to a third person report. This is likely to be at least in part a consequence of shared expectations of how a book review or novel precis should be written. However, it does suggest that readers are able to take a different deictic perspective on narrated events to those presented in the novel.

A switch in reporting style from first person to third has implications for text-world analysis. In Section 6.2, I discussed the implications of the empty text-worlds generated by Atwood’s prose, noting that function-advancing propositions do not populate the initial text-world, but instead populate the epistemic modal-worlds generated by the narrator’s testimony. In most reader precis, the epistemic nature of these function-advancing propositions was lost, and reviewers presented events as factual statements about the world in which the narrator resides. Specifically:

- 32 reviewers (64%) submitted precis that did not acknowledge the role of the narrator’s testimony. In other words, their precis were offered as factual descriptions of the initial text-world, and their reviews were indistinguishable from reviews of a heterodiegetic narrative. For example:

- A woman travels in the company of friends to a remote island to find out what happened to her father (GRS-2)
- 16 reviewers (32%) offered precis presented as factual descriptions of the initial text-world but acknowledged the privileged role of the narrator, although they did so without reflecting the modal structure of the original text. For example:
 - Our unnamed female narrator brings her lover and their two (married) friends to her childhood lakeside cabin in the woods (GRS-3, my emphasis)
- 2 reviewers (4%) described events in the fictional world of the text in a manner that recreated the original epistemic modal-world structure by making explicit reference to the narrator's speech acts. For example:
 - What surfaces are a flood of bleak fragments spanning her life so far. Yet these are as murky as the surrounding water: "I have to be more careful about my memories, I have to be sure they're my own." We join her in attempting to collect them and piece them together (GRS-96)

Notably however, both these reviewers also included statements in their reviews that presented some events reported by the narrator as if they were fact. Moreover, plenty of reviewers who presented precis without referencing the act of narration then went on to discuss the effects of first person narration elsewhere in their reviews:

Was it my lack of awareness or the author's skill that it wasn't until afterwards, mulling over how to review without a major spoiler, that I realized that this first person narrative never once reveals this first person's name. (GRS-45)

Thus, while the shift from first to third person in these precis is unremarkable, the more salient point is that, by constructing these precis as discrete sections within their reviews, the majority of reviewers appear to be demonstrating a process by which they extract a core set of 'true' events from a complex testimony. Every one of the reviewers who submitted a precis did so in a manner which suggested they accepted that at least some of the narrator's testimony offered an accurate description of affairs in the world from which they were narrating. Moreover, the vast majority of precis contained *only* information readers had presented as factually correct in this world. Reviewers who did remark on the narrator's unreliability tended to do so outside of the precis section of their review. This trend was epitomised by reviewer GRS-50, who offered factual statements about affairs in an initial text-world in a paragraph headed 'synopsis', and then used a subsequent section labelled 'review' to explore more ambiguous claims:

It all got quite confusing and sometimes the story appeared to be in a stasis, where nothing felt real [...] There's also the mention of war and its accompanying fear and devastation, memories from the narrator's childhood. While calling her childhood a 'good' one, it's evident there's a sense of disassociation from her parents. (GRS-50)

Collectively, these reviews suggest that comprehending a novel like *Surfacing* appears to involve a process of consolidation in which some - but not all - of the claims presented within the narrator's epistemic modal-world of narration are mapped into an evolving representation of states of affairs in the 'empty' initial text-world. At times this process may happen subconsciously, but at other times a conscious awareness of discrepancies between such epistemic modal-worlds of narration and the empty text-worlds appears to become significant - as happens when readers notice that 'everything the woman has told us at the start of the story is revealed to be a lie' (GRS-48).

Before discussing this finding further, I now consider whether this tendency to present a narrator's epistemic claims as if they had factual status might be one example of a wider pattern evident in the precis-writing process.

6.3.2.3 - Boulomaic modal-worlds - Analysis 1

Traditional definitions of narrative often focus on the representation of events unfolding in time (Herman 2009: 1 & 18). However, critics such as Palmer (2004), Ryan (1991) and Zunshine (2003, 2006 2007, 2015) have extended such definitions by suggesting that the ability to keep track of characters' beliefs and desires alongside their actions is essential to narrative understanding. This notion, discussed by Ryan within her possible worlds theory framework (see section 3.2.2), can also be explored using Text World Theory. For this reason, examining patterns of modality in the precis sub-corpus is revealing.

I begin by comparing two indicative examples, each of which was offered as the opening of a precis:

- The unnamed narrator returns to her father's home on an island in a lake in Quebec because her father has gone missing. [...] (GRS-30)
- A woman goes back to the small Quebec village of her childhood vacation to look for her estranged father, who was reported missing. She doesn't really want to see him, but she needs to know he is safe. [...] (GRS-21)

These examples describe broadly similar scenarios, but contain significant differences. Both invoke an initial text-world and populate it with small number of world-building elements. In this case, 'her father's home' and 'the small Quebec village' can be interpreted as alternative descriptions of the same referent. However, while example GRS-30 prompts a single world-switch cued by the shift from present to past tense with the clause 'because her father has gone missing', both worlds triggered by

this extract exist at the same ontological level. In this account, the link between the father's disappearance and the narrator's response is presented as a simple relationship of cause and effect, and no information is given about the narrator's attitude towards her journey, or what she hopes to achieve by returning home. By contrast, the precis from GRS-21 prompts the creation worlds at different ontological levels. It prompts a negated boulomaic modal-world with the clause 'She doesn't really want to see him', and a deontic modal-world with 'she needs to know he is safe'. In addition, it contains the clause 'to look for her estranged father', which describes an as-yet-unrealised intention of the protagonist. Werth (1999: 53) describes such clauses as 'purpose clause[s]', and suggests these create what he describes as 'purpose worlds', whose contents does not necessarily reflect states of affairs in the future of the parent text-world. Thus, in my reading, this clause is also bouloumaic modal-world forming, since the narrator's desire to search for her father is as-yet-unrealised. Taken as a whole, the conceptual structure prompted by GRS-21 therefore retains more of the ontological complexity prompted by the original text.

In the sub-corpus of 50 precis, 24 reviewers (48%) prompted the creation of a boulomaic modal-world containing a function-advancing proposition encapsulating the narrator's ambition to find her missing father. This was by far the most common modal-world prompted by the precis in the sample: a fact which supports Ryan's suggestion that modelling a protagonist's desires may be an important part of narrative understanding. However, this figure is significantly lower than the total number of precis (84%) that made reference to the missing father, meaning that a significant number of respondents presented this information without using boulomaic modality. We contrast the following responses which prompt boulomaic worlds:

- She is hoping to find clues to her father's mysterious disappearance. (GRS-16)
- She hides her true intentions of returning to this familiar lake however. She is trying to find her father. (GRS-3)

with these which present ontologically flat descriptions of the same event:

- [Atwood tells the story of] a young woman who returns to her rural childhood home in northern Quebec after receiving word that her elderly father has gone missing.(GRS-73)
- Learning of the disappearance of her father, [the narrator] efficiently organizes a lift back to the home she fled abruptly decades ago. (GRS-45)

It should of course be remembered that the absence of a boulomaic modal-world in a precis cannot be taken as evidence that the reviewer has forgotten that the original state of affairs was expressed using boulomaic language. However, there does appear to be a tendency for some reviewers to offer precis that are ontologically more simple than the texts which prompted them, and to focus on reporting only events at the initial text-world level; a behaviour which appears to mirror that discussed in the previous section.

6.3.2.4 - Boulomaic modal-worlds - Analysis 2

One more observation was made with respect to boulomaic worlds in this data set. We compare two more indicative examples:

- While the other three are there to enjoy the scenery, even hoping to shoot some footage for an arthouse film they are making, our protagonist is intent on finding her father who has recently vanished. (GRS-59)
- The main character, her boyfriend, and a dysfunctional married couple travel to her childhood home on an island in Quebec to attempt to locate her missing father. (GRS-47)

Both of these passages prompt the reader to create one or more boulomaic modal-worlds. However, GRS-47 prompts just one world, which is offered as a representation of the joint desires of four separate characters. By contrast, GRS-59 prompts two different boulomaic modal-worlds to represent the fact that the narrator's reasons for returning home are not the same as those of her friends; a conceptual structure which more closely matches that prompted by the initial text. In Atwood's text, David gives a clear indication of his reasons for making the trip:

"I'd like to go down to the lake for a couple of days," I say to David, because it's his car. "I'd like to look around, if that's okay."

"Great," says David. "I'm going to get me one of them smart fish." He brought along a borrowed fishing rod... (S:23)

Further evidence that David and the narrator's other companions do not share the narrator's motivations is provided elsewhere.

They're doing me a favour, which they disguised by saying it would be fun, they like to travel. But my reason for being here embarrasses them, they don't understand it. (S10)

This finding may be particularly significant. I noted above how the omission of modal-worlds from such precis could not be taken as evidence that reviewers had forgotten their existence. However, Reviewer GRS-47's decision not to recreate discrete boulomaic modal-worlds to encapsulate the conflicting desires of the non-narrating characters (such as catching 'one of them smart fish'), alongside the claim that all four characters shared a common motivation, provides a direct contradiction of the original text rather than a simple omission. In all, 5 of the 24 reviewers who offered a boulomaic modal-world describing the narrator's desire to find her father attributed this motivation to the entire party rather

than to the narrator alone. This behaviour could be seen as a form of ontological consolidation distinct from the tendency to focus only on states of affairs in the world from which the narrator narrates.

Intriguingly, this finding appears to mirror behaviour in two studies reported by Norledge. In the first, she documents reading group responses to Paolo Bacigalupi's 'Pop Squad', in which she describes one reader attributing a narrator's mental states to other characters, and in doing so 'position[ing] the narrator as an extension of collective society' (2021: 55). In the second study she reviews critical responses to Ray Bradbury's *Fahrenheit 451*, and suggests that readers judge the protagonist's attitudes to arson to be characteristic of those of the society he inhabits (2022: 70). Thus, this pattern of recasting the beliefs of a single character as more widely applicable may be a consolidation process that occurs commonly during or after reading. I discuss further examples of this in my second study in the following chapter.

6.3.2.5 - Application of schematic knowledge

In addition to mapping discrete world-building and function-advancing propositions between text-worlds and modal-worlds at different ontological levels, it was noticed that reviewers engaged in another distinctive consolidation process. Previous studies of recollected narratives (see Bartlett 1932 and Chapter 2 of this thesis) have emphasised the role that schematic knowledge plays in shaping reader summaries at later points in time. The Goodreads precis frequently drew on events from different parts of the novel, and thus from text-worlds separated by multiple world-switches, and summarised them within a single text-world. Often such summaries involved the application of schema knowledge. The importance of such knowledge can be seen in the following precis, quoted in its entirety:

An unnamed 20-something narrator travels with her lover and another couple back to her childhood home, an isolated cabin on an island in Quebec's bushland, because her father has gone missing. While ostensibly searching for him, they spend their ten days alone on

the island doing standard camping-trip activities like fishing, canoeing, and picking wild blueberries. (GRS-34)

In this precis we find - other than the fleeting world-switch prompted by the clause 'because her father has gone missing' - a single text-world in which the enactors (the narrator, plus 'her lover and another couple') are described using function-advancing propositions which correspond to actions narrated at different points in the book. The party arrive at the cabin on page 27, go fishing from pages 57-60, and again from pages 112-115, pick blueberries from pages 78-80, and take several trips by canoe. These events represent only a fraction of those recounted by the narrator, and this reviewer makes no reference to function-advancing propositions included by other reviewers; for example 'The couple and the boyfriend are filming a documentary' (GRS-12), or 'David is always making demeaning sexualised jokes' (GRS-28). Instead, the reviewer has clearly chosen to report these particular events because they conform to a pre-existing schema of 'standard camping-trip activities', and this schema has shaped their summary of the text.

Precis GRS-34 was notable for the fact that it singled out several individual events, each one corresponding to an identifiable scene or scenes in the original text. By contrast, many precis contained function-advancing propositions which are likely to represent a cumulative understanding of multiple narrated events, but did so without listing the individual events themselves. Again, such descriptions emphasised particular kinds of happenings over others, and often revealed the role of schema knowledge in reader interpretations. Reviewer GRS-23's description of the narrator '[g]radually letting herself go back to nature' represents a possible alternative construal of the 'standard camping trip activities' listed in GRS-34, but conceivably also draws on the narrator's description of the removing her clothes (171), and deciding to eat only raw food and sleep out of doors (172). Another possible interpretation of these latter occurrences is that of reviewer GRS-48, who suggests that the narrator 'goes bat shit crazy'. Thus, different reviewers selected from - and construed - the events in the text in different ways. In each case, multiple function-advancing

propositions from different text-worlds appear to have been consolidated into a single function-advancing proposition presented in a single text-world.

Examples such as these from within my corpus hint at an interesting process that appears to be taking place during narrative comprehension. Toolan, in attempting to define the typical characteristics of a narrative, has emphasised the importance of *connected* events, arguing that narratives do not simply represent a series of random occurrences but instead present ‘consequential’ rather than ‘sequential’ descriptions (2013: 6). The reframing of multiple function-advancing propositions as single events appears to have implications for how readers construe processes of cause and effect in narrative summaries, as the following example demonstrates:

the past haunted her and turned her into a lunatic [GRS-71]

This summary appears to contain two schematic reconstruals. Firstly, events presented in *Surfacing* as multiple acts of memory, each conceived through a discrete world-switch, have been reframed as a single function-advancing proposition (‘the past haunted her’). Secondly, as described above, events presented in multiple text-worlds have been reframed using the single function-advancing proposition ‘turned her into a lunatic’. Crucially, this summary presents ‘the past’ as the actor in a material intention process (Gavins 2007: 56; Halliday 1985) responsible for the narrator’s change in state. Similar readings of *Surfacing* are implied - though not stated as explicitly - by other summaries which recounted the narrator’s acts of memory before recounting her mental breakdown, implying a similar direction of causation:

As her childhood memories begin to resurface, she starts acting in bizarre ways until she loses her marbles altogether (GRS-70)

This reading, however, is not inevitable if one considers the configuration of individual text-worlds prompted by the text. One of the final text-worlds the reader is invited to construct when reading Atwood's novel is one which contains an enactor of the narrator and an unnamed figure feeding birds in the garden: an activity previously associated with the narrator's dead mother. This ghost-like presence, which subsequently vanishes, is described as having hair that is 'long, down to her shoulders, in the style of thirty years before' (176). This incident, which could fairly be described as an example of the narrator being 'haunted' by the past, is experienced *after* those described above, which I have previously argued invite readers to invoke a 'madness' schema, and could conceivably be read as a product of - rather than as a cause of - the narrator's instability. However, such a reading is not captured in the summaries quoted above, which imply an opposite direction of causation. The question of how such schematic summaries lead to particular construals of cause and effect in narrative comprehension is an intriguing one, but one which this study was not designed to explore. However, it opens possibilities for future research.

In analysing these reviews, it was also noticed that the application of schematic knowledge affected reader summaries via concepts of genre (see Section 2.2.1). The question of which genre labels could be applied to *Surfacing* was one which engaged a number of reviewers:

- On the surface, this novel is a detective story. (GRS-2)
- The back cover says the book is "part detective novel, part psychological thriller", and it's really neither, at least not in the way we traditionally think of those genres. (GRS-34)

Readers who attempt to read a text as a detective story are likely to foreground certain events. For example, reviewer GRS-2 followed their claim about the story being a detective story by describing the narrator searching for her missing father, implying that this event conformed well to their detective story schema. By contrast, reviewer GRS-34 justified their claim that the novel did *not*

conform to the detective novel genre with the observation that '[t]he action is entirely internal'. These descriptions suggest that genre schemas influence readers' long-term memories of the text.

6.3.2.6 - Narrative re-ordering

Let us consider again the precis from reviewer GRS-34, which begins thus:

An unnamed 20-something narrator travels with her lover and another couple back to her childhood home, an isolated cabin on an island in Quebec's bushland, because her father has gone missing. (GRS-34)

In this summary, events are presented to the reader in the same order as they occur in the original text. The summary invites the creation of an initial text-world representing the narrator's journey. It then prompts a world-switch (cued by the shift from the simple present to the present perfect tense) to describe the fact that 'her father has gone missing': a fact readers only discover after they learn of the narrator's journey. The same pattern was evident in the majority of precis in which both events were mentioned. However, in two of the 50 precis, events were re-ordered and presented in their correct chronological order:

'The main character has grown up in a village in the Canadian wilderness but left it a long time ago. Her father has now gone missing and she returns with her boyfriend Joe and two of their friends, David and Anna.' (GRS-58)

The initial text-world prompted by this summary contains the function-advancing proposition 'the main character has grown up', and three world-switches occur before the events that begin participant GRS-34's precis are recounted. It is of course worth re-iterating that on the basis of this contribution alone, we cannot determine whether the reviewer has re-ordered events at

the point at which they were encoded in memory, or during the process of recalling them and composing the review. In this respect, however, the second re-ordered precis provides a clue:

[B]efore the story begins, a young lady (our heroine/narrator) has an affair with an older, married man; she becomes pregnant; he arranges for an abortion, which she has. Later, she becomes involved with a different man. She and her lover, plus a married couple they know, go to a remote island (located in northern Quebec), the island our heroine/narrator spent her childhood on [...] (GRS-92)

This summary reveals clear evidence that the reviewer is able to conceptualise a chronological sequence of events, and is able to determine which of these happened ‘before the story begins’, implying the existence of two discrete mental representations; one encapsulating events in the order in which they are narrated, and a second encapsulating the order in which they occurred. I discuss the phenomenon of narrative reordering more fully in the following chapter.

6.3.2.7 - Reviewer uncertainty

One final feature of reader precis was noted in this analysis. In the discussion above, I cited examples of reviewers appearing to treat states of affairs presented in modal-worlds as accurate descriptions of the world from which the narrator narrates. Often, such assumptions appear to have been made uncritically. However, there were also occasions in which participants expressed varying degrees of certainty about the deductions they had made.

In addition to generic statements of uncertainty (such as ‘it’s not always clear at first whether she’s talking literally or metaphorically’: GRS-5), 13 of the 100 reviewers in the full corpus expressed a degree of uncertainty about at least one particular state of affairs in the world from which the narrator narrates:

- The beginning of the novel gives me a setting of the 70s, but maybe I'm all wrong on that one. The MC [main character] talks about her childhood and "the war," with lots of references to WWII type conflict. Yet, Joe seems more of a post Vietnam war vet than a WWII vet (GRS-96 - my emphasis)
- [O]ur protagonist has only known them for about two months and has probably been with her new boyfriend (if you could call him that) for less [than] that time (GRS-69 - my emphasis)

As far as this reader can tell, Mom was a distant/alooof type and Dad was occasionally cool but waaay out there in his thinking (GRS-6 - my emphasis)

However, a more common behaviour was for reviewers to express uncertainty about the inferences they had made concerning characters' motivations or states of mind:

- 'Joe wants to get serious but the protagonist wants to keep things casual – presumably because of the trauma of her last marriage. (GRS-81 - my emphasis)
- Anna is not so innocent either. Whether this because of David's behaviour, we don't know (GRS-51 - my emphasis)

In addition, responding to the particular themes of this novel, several readers expressed uncertainty about the conclusions they were able to draw about the mental health of the narrator:

[A]gain, we don't know whether this is all the crazed imagings of a person descending into madness. (GRS-81 - my emphasis)

These results provide hints that judgements about the certainty or uncertainty of states of affairs in the world from which the narrator narrates form an integral part of readers' long-term mental representations of narratives, as do judgements about characters' states of mind.

It is also perhaps significant that a high percentage of such judgements were expressed in the third person in reader reviews. On occasion, participants contrasted such third person claims with claims made in the first person. In other words, they appeared to distinguish what they saw as universally accessible readings from their own personal interpretations, or their personal failures to comprehend an element of the narrative:

- The reader is to be kept guessing. We are to be tantalized by the mystery. We are meant to be left in the dark but egged on to search for understanding. (GRS-9 - my emphasis)
- As we learn more about the characters, I struggled to understand why on earth the main character was friends with some of them (GRS-41- my emphasis)

I explore this idea further in the following chapter, with data from my second reader-response study.

6.4 - Discussion

In Chapter 3, I offered three hypotheses about how readers' text-world mental representations may change after the moment of reading:

Hypothesis 1: Just as readers and listeners do not remember narratives word-for-word, so they do not recall them world-for-world. In other words, the conceptual structure prompted by a narrative during moment-by-moment comprehension may not always be retained when a text is stored in, and subsequently retrieved from, the long-term memory.

Hypothesis 2: As representations of a narrative are stored in long-term memory and subsequently retrieved, the conceptual structure of the representation is simplified as readers assume that world-building elements and function-advancing propositions presented in modal-worlds can be taken as reliable descriptions of ontologically prior text-worlds.

Hypothesis 3: As representations of a narrative are stored in long-term memory and subsequently retrieved, elements are added to the conceptual structure as readers imagine states of affairs at the most ontologically prior level of the discourse that are not described explicitly, or as they create representations of the beliefs, desires or other mental states of characters that are not cued explicitly in the text.

I now revisit these in the light of the findings from discussion *Surfacing*. In the discussion above, I noted the difficulties of using Goodreads reviews to draw conclusions about representations of *Surfacing* in readers' long-term memories. In particular, I noted that it is not possible to conclude that elements missing from a Goodreads review have been forgotten by a reviewer. However, examples of readers providing reviews with demonstrably different conceptual structures to those prompted by the original text do have the potential to provide evidence that processes of consolidation have taken place subsequent to reading.

In my corpus of *Surfacing* reviews, all the reviewers who provided a precis of *Surfacing* did so in the third person. Little significance can be attached to this finding in isolation as this is likely to reflect expectations about how such reviews should be written. However, such precis usually did not reflect the ontological complexity of the original text, failing to reflect the distinction between the empty text-world and the epistemic modal-worlds of narration. Moreover, readers frequently restricted these precis to a subset of events that they appeared to accept as true in the world from which the narrator narrates. This tendency, combined with multiple examples of readers juxtaposing their precis with specific doubts about the reliability of particular claims made by the narrator,

suggests that reading a novel such as *Surfacing* involves an ongoing process of comparing elements of the narrator's testimony to an evolving representation of states of affairs believed to be true in the world from which the narrator narrates. One consequence of this is that worlds which are initially conceived as 'empty text-worlds' in the traditional text-world theory account of moment-by-moment comprehension may not remain empty in the longer term, as world-building elements and function-advancing propositions presented in the epistemic modal-worlds prompted by a narrator's testimony are mapped into the initially empty text-world; a phenomenon predicted by my Hypothesis 2.

If this is the case, it raises a question of what happens to the modal-worlds which are created in the minds of readers in cases where they produce summaries which show information has been mapped into the initially empty text-world. Are these modal-worlds retained in the memory alongside the evolving representation of the empty text-world, or are they subsequently forgotten? Here the Goodreads data provides less evidence, since it cannot be used to prove that elements are absent from a reader's memory. However, my own reading and text-world analysis of *Surfacing* may inform this question. In Section 6.2.3, I described how I read the opening lines of the novel and created a mental picture by combining world-building elements from more than one epistemic modal-world. My own memory of this opening scene did not, I believe, retain any sense of having being assembled from two discrete representations (until, of course, I subsequently went back and analysed Atwood's language in detail). Moreover I did not, I believe, retain two discrete but identical mental pictures of the landscape the narrator described; one corresponding to my understanding of the text-world containing the narrating narrator, and one corresponding to my understanding of the narrator's description. Instead, I suggest, I retained a memory of a single state of affairs, conceived at a single ontological level; a phenomenon compatible with both hypothesis 2 (which predicts the mapping of structure into the initially empty text-world) and hypothesis 1 (which predicts that conceptual structures in the long-term memory are simplified).

My discussion of schematic knowledge offered another mechanism by which conceptual structures may be simplified. In section 6.3.2 I discussed how one reader had collated function

advancing propositions presented in different text-worlds and presented them in a single text-world under the schematic header 'standard camping-trip activities'. This example was unusual in my Goodreads corpus, inasmuch as it was presented in enough detail for me to connect the specific schema with specific textual cues which I could isolate on specific pages of the novel. However, the corpus provided plenty more instances which suggested that reviewers had combined multiple function-advancing propositions to create higher-order propositions. The following are typical:

- Letting her wild interior surface, she heals from the wound she has carried (GRS-2)
- ...eventually the narrator descends into her own private madness (GRS-6)
- She self actualizes. She gains enlightenment. (GRS-55)

In these examples, statements which qualify as function-advancing propositions in reader reviews (such as '[l]etting her wild interior surface') do not correspond to function-advancing propositions in the original text). Review GRS-55 is particularly instructive. By invoking the notion of 'self-actualisation', the reviewer demonstrates the application of a schema in the form of a formal psychotherapeutic concept (Kenward and Van Deurzen 2005: 875) which is not invoked explicitly in Atwood's text. By concatenating events from across the text in this way, such examples provide evidence of how reviewers are able to produce summaries that have a simplified conceptual structure. As in the previous example, however, they do not provide evidence that the original conceptual structure has been forgotten. Indeed, it is likely that many reviewers, if asked to provide examples to illustrate their own summaries, may have been able to produce more detailed accounts that matched the conceptual structure of the original text more closely. It may also be the case that some details are forgotten and some remain in the memory alongside consolidated representations. Nonetheless, such examples demonstrate a mechanism by which the simplification processes predicted by Hypothesis 1 may occur. The extent to which higher-level function-advancing propositions complement or replace memories of lower-level propositions could be explored in further studies.

My discussion of the boulomaic modal-worlds prompted by reader summaries also suggests a mechanism by which conceptual structures may be simplified in the long-term memory. I noted above that, while some reader precis of *Surfacing* provided information about the desires and goals of the protagonist and other characters, some precis focussed only on reporting states of affairs in an initial text-world. Again, we note that the absence of detail in a summary is not evidence of the absence of such details in a reviewer's long-term memory. However, this finding does provide hints that different readers may adopt different comprehension and consolidation strategies. A desire to explore this phenomenon further provided a key motivation for the design and analysis of my second reader-response study, presented in Chapter 7.

In my discussion of boulomaic modal-worlds, I also noted a difference between reviewers who listed different motivations for the narrator and for her fellow characters, and reviewers who attributed the same motivation to all four major characters in the text. This latter approach represents a potential consolidation strategy that was not anticipated in my original hypotheses. I also explore this phenomenon further in my analysis in Chapter 7.

In summary, many of the readings I have discussed in this chapter are compatible with behaviours anticipated in hypotheses 1 and 2. My third hypothesis - that readers add elements to conceptual structures that are not prompted by a source text - is harder to test with the methodologies used in this chapter, since it is not practical to perform a text-world analysis of an entire novel-length text. However, I have presented evidence to suggest that readers do keep track of the different degrees of certainty they attribute to the different inferences they have made about states of affairs in the world from which a narrator narrates; a process which adds to rather than simplifies the ontological complexity of long-term mental representations. Again, this phenomenon will be discussed in more detail in the following chapter.

In Chapter 7, I present the results of a second reader-response study, using data gathered with an alternative methodology, in order to address some of the limitations highlighted in this study, and to explore some of my initial findings more fully.

7. Case Study 2: Margaret Atwood's *The Blind Assassin*

The Blind Assassin (2000) is Margaret Atwood's tenth published novel and, as one of her two Booker Prize winning texts, remains among her most critically acclaimed works. The book's primary narrator Iris Chase (later Iris Griffen) looks back on her life and remembers her sister, whose death in a car crash is described in the opening pages. The novel also contains passages from a fictional novel - also entitled *The Blind Assassin* - which itself features a further embedded narrative. Both plots within this fictional text echo elements of Iris's life. In addition, Iris's homodiegetic testimony is intercut with fictional newspaper and magazine articles which provide alternative accounts of the events she narrates. As such, the novel's complex discourse structure makes it suitable for a study of this kind.

I begin this chapter with a summary of key themes that emerge in both academic and non-academic discussions of the novel, drawing on a corpus of 100 reviews assembled from the *Goodreads* website, using the same sampling methodology as the *Surfacing* corpus discussed in the previous chapter. In Section 7.2, I offer my own Text World Theory analysis of the opening chapters of the novel, attempting to account for some of the readings identified in Section 7.1, and also illustrating in more precise terms the challenges facing readers who attempt to establish a single coherent understanding of the events Iris describes. In Sections 7.3, 7.4 and 7.5, I report the results of a reader-response study designed to test some of the hypotheses about readers' long-term mental representations of fictional narratives which I offered in Chapter 3 and refined in Chapter 6. In Section 7.6, I reflect again on these hypotheses, paving the way for a more general discussion of how we might begin to expand Text World Theory in the following chapter.

7.1 - Reader Responses to *The Blind Assassin*

Academic criticism of *The Blind Assassin* reflects many of the issues discussed with respect to Atwood's broader oeuvre, and which I introduced in Chapter 5 of this thesis. Davis (2006: 26) suggests the novel sits alongside *Lady Oracle* and *Cat's Eye* as one of several 'fictive autobiographies' whose protagonists

'write and rewrite their own stories' (2006: 15). McWilliams identifies the text as one of Atwood's key 'bildungsroman' novels, and draws a comparison with *Cat's Eye*, suggesting that together:

[The novels] present painting, writing or telling a life story as a crucial medium of reading and rewriting the past. The novels share an interest in the challenges and paradoxes of "writing a life" and draw attention to the processes of evasion, subversion and illusion that are at work in all narratives of selfhood. (McWilliams 2009: 113)

The theme of life writing that runs through *The Blind Assassin* raises questions of narratorial unreliability; another topic frequently discussed in relation to the text (for example Hembrough 2017; Ingersol 2003; Robinson 2006; Wilson 2009), with Wisker reflecting a widely held view that the text 'weave[s] stories which present different versions and undermine any final reading' (2012: 132).

Iris's unreliable narration was also noted by a minority of respondents in my Goodreads corpus:

- [I]n *Iris*, Atwood has created a delightfully crusty, entertaining and fascinatingly unreliable guide. (GRTBA-13)
- Throughout its laborious unfolding - flashback! story within a story with a story! unreliable narrator! - I had the vaguely irritating feeling I was witnessing a particularly intricate demonstration of literary acrobatics (GRTBA-82)

Comments from reviewers also suggested that, rather than spotting outright untruths in Iris's testimony, they were responding to her tendency to withhold information. Thus, in Phelan's typology (2005, 2007 and Section 6.1.2 of this thesis), Iris 'underreports' rather than 'misreports':

- Iris is not the most complete and objective storyteller (GRTBA-21)
- Surely Iris knows more than she's letting on. (GRTBA-13)

This, in turn, led reviewers to suggest that a significant feature of *The Blind Assassin* is the way it encourages readers to attempt to fill gaps in Iris's testimony:

so much is implied, but so little stated (GRTBA-3)

In all, 9% of respondents commented directly on Iris's unreliability: a smaller percentage than the 17% who made equivalent claims for *Surfacing*. However, it is perhaps significant that in *The Blind Assassin*, Iris's testimony is cut with passages of other discourse types. As a result, some reviewers discussed Atwood rather than Iris as a source of the novel's ambiguity: a pattern which was not evident in the *Surfacing* corpus:

- You must always read between the lines, Atwood's lines that is. (GRTBA-47)
- Atwood clearly plays a game of deception with the reader (GRTBA-76)

I discuss the fragmented structure of the novel in more depth below.

In other echoes of broader Atwoodian themes, academic reviewers of *The Blind Assassin* have explored what Iris's act of autobiography says about female experience (Bouson 2003; Ingersoll 2003), and discussed how Atwood's blend of literary genres allows her to explore and challenge dominant cultural narratives such as myths, fairy tales and popular novels (Staels 2004; Wilson 2002; Wisker 2012). However, one feature that was very prominent in my Goodreads corpus but less evident in professional criticism was evidence of the effect that the novel's reputation had on reviewers' readings. While academic critics may acknowledge a text's status, they rarely imply that this knowledge has framed their own interpretation of the text. However, an awareness of *The Blind Assassin's* reputation clearly framed the readings - and resulting memories - of many online reviewers:

- I chose *The Blind Assassin* because it won the prestigious Man Booker Prize (Man! Booker Prize!) for the year 2000 (GRTBA-37)
- There are stories within stories within stories and it's the reason Atwood won the man book prize in 2000 (GRTBA-15)
- First thought was, I think this might have been a really good 350 page novel. Unfortunately it's almost twice the size and as cluttered with random detail as an attic. In this sense it's a typical Booker Prize winner (GBTBA-14)

In all, 23% of reviewers in my Goodreads corpus made explicit mention of the text's prize-winning status or its ranking on a published 'best novels' list in their reviews.

7.1.1 - *The Blind Assassin* and Narrative Structure: A Cognitive Perspective

The complex narrative structure of *The Blind Assassin* is frequently commented on by academic critics. For example, in making the case that the novel constructs memoir as a feminist genre, Bouson notes that:

Iris's frame narrative and family memoir are interspersed with a series of news stories, society news pieces, engagement and birth announcements, and obituaries. The materials that record public events from Iris's life, although arranged chronologically, precede and thus foreshadow Iris's account. Iris's memoir dialogically contests the public and official family versions of events and tells the unofficial and secret version of family history (Bouson 2003: 252)

However, this feature of Atwood's text has received particular attention from Dancygier, who approaches the novel from a cognitive stylistic perspective and explores how it can illuminate broader questions of how individuals make sense of fragments of narrated experience. For Dancygier, the

novel can be used as a test case to explore ‘some of the mechanisms which underlie the construction of a coherent story out of several substories’ (2007: 134). She argues that, if we accept that a story resides in a reader’s mind rather than in a text, we must acknowledge that ‘there is no one-to-one correspondence between textual fragments and story elements’ (2007: 135). She illustrates this point with reference not to *The Blind Assassin* itself but to a plot event in *The Great Gatsby*, which has parallels with the opening of Atwood’s novel:

[the story which emerges from the text] makes Daisy responsible for [Myrtle’s death], since she drove the car that hit Myrtle, but the text does not describe her doing it. There is clearly enough in the text to let the reader “figure it out,” but it is not part of what is communicated. (Dancygier 2007: 135)

This sense of ‘figuring out’ what is happening from incomplete or conflicting textual fragments is one that is reflected in accounts of reading *The Blind Assassin* shared on the Goodreads website:

‘We gradually learn more about these two girls, their parents, and the men they become involved with. But much of the information is ambiguous, equivocal, obscure - we get clues about something, think ah yes, so that’s what’s going on, then later well maybe I was wrong, then later yet no, I was right the first time. And new obscurities pop up, casting a veil over things that seemed clear earlier on.’ (GRTBA-17)

Dancygier suggests that the complex structure of *The Blind Assassin* makes it a ‘thought-provoking laboratory experiment’ which foregrounds the comprehension strategies needed to piece together ‘emergent story’. She then argues that this process is ‘the same in fictional narratives of all kinds, even though they may be ostensibly less fragmented’ (2007: 148).

In Dancygier's model of narrative comprehension, readers use a written text such as *The Blind Assassin* as a prompt to create what she terms 'narrative spaces'; mental representations that she suggests are similar to Fauconnier's mental spaces (1985, 1997 and Section 2.2.5 of this thesis). In this respect, her account is broadly compatible with both Text World Theory and the storyworlds model, though Dancygier does not invoke these frameworks in her discussion. She illustrates her account by suggesting that the opening lines of *The Blind Assassin* prompt the creation of two conflicting 'narrative spaces': one in which Laura's sister kills herself, and one in which she suffers an accidental death. She labels these constructions the 'suicide' space, and the 'accident' space (2007: 139). She also suggests that readers generate discrete narrative spaces to represent the discrete states of affairs prompted by Iris's narration and by the novel-within-a-novel which unfold at different ontological levels. She then suggests that an emergent story structure emerges as a result of readers blending these discrete narrative spaces together in a process of conceptual integration (Fauconnier and Turner 2002 and Section 2.2.5 of this thesis).

In her subsequent discussion, Dancygier provides a convincing account of how the process of conceptual integration can explain how readers draw analogies between the novel's two storylines, for example by realising that characters in one narrative space can be paired with characters in another. However, it seems to me that this process is different to the strategy needed to reconcile the existence of two conflicting 'suicide' and 'accident' narrative spaces, which does not involve a process of assembling an emergent story from incomplete fragments but instead requires readers to choose between two conflicting states of affairs.

In the rest of this chapter, I explore whether Text World Theory can offer a complementary account of the how readers comprehend the opening passages of *The Blind Assassin*, and by extension, how they may attempt to reconstruct narratives from textual fragments.

7.2 - *The Blind Assassin*: A Text World Theory Analysis

In this section I offer text-world analyses of two passages from the opening chapters of *The Blind Assassin*, exploring the idea that the novel is one in which ‘so much is implied, but so little is stated’ (GRTBA-3). This analysis sets up my discussions in Sections 7.4 and 7.5, in which I review the results of a reader-response study where respondents were asked to read and summarise the passages I discuss here. The passages are replicated in their entirety in Appendix A.

The Blind Assassin begins with a chapter of homodiegetic narration, in which Iris Griffen recounts the death of her sister Laura in a car crash, and remembers the moment in which she learned of the tragedy. These are the opening lines:

Ten days after the war ended, my sister Laura drove a car off a bridge. The bridge was being repaired: she went right through the Danger sign. The car fell a hundred feet into the ravine, smashing through the treetops feathery with new leaves, then burst into flames and rolled down into the shallow creek at the bottom. Chunks of the bridge fell on top of it. Nothing much was left of her but charred smithereens.

I was informed of the death by a policeman. (TBA: 3)

In this opening passage, the first person possessive pronoun ‘my’ alerts the reader to the presence of a homodiegetic narrator, and as with any homodiegetic narration, the initial text-world prompted by the text is the initially empty world from which Iris narrates. Iris’s opening sentence, written in the simple past tense, invites the reader to construct an epistemic modal-world, anchored in time at a moment prior to the act of narration, and populated initially by a car, a bridge and an enactor of the character Laura. However, this opening passage does not contain the frequent, explicit linguistic markers of epistemic modality that characterised the opening lines of *Surfacing* (described in Chapter 6). Other than the negated world prompted by the clause ‘nothing much was left of her’, the events described in the first paragraph unfold at a single ontological level. The epistemic nature of Iris’s

testimony is therefore not foregrounded, and Iris's precise descriptions (signalled by features such as the enumerated 'Ten days' and 'a hundred feet') may encourage the reader to accept the function-advancing propositions as uncontested facts.

Iris's first chapter of homodiegetic narration is followed by a fictional newspaper report of the inquest into Laura's death, purportedly taken from the *Toronto Star* newspaper, which offers a different perspective of the events described in Iris's testimony. Competing claims offered in these two opening textual fragments offer conflicting accounts of whether Laura's death was an accident or a suicide. This juxtaposition of narrative and newspaper report - evident to readers once they are several pages into the novel - may function as a reminder that Iris's testimony is partial and subjective, and may prime readers to be aware of possible discrepancies between Iris's testimony and states of affairs in the world from which she narrates.

However, elements of Iris's narration in this first chapter can also be interpreted as ambiguous even when read in isolation. The second paragraph of Chapter 1 prompts the creation of a new text-world (a world-switch), with the line 'I was informed of the accident by a policeman'. Here, the invitation to create a new world is not signalled by the narrator explicitly offering new deictic parameters. Instead, the interpretation relies on the common-sense inference that if the narrator was informed of the accident, she could not have been present at the place and time that it occurred. Recounting this meeting, the narrator tells the reader:

He said the tires may have caught on a streetcar track or the brakes may have failed, but he also felt bound to inform me that two witnesses - a retired lawyer and a bank teller, dependable people - had claimed to have seen the whole thing. They'd said Laura had turned the car sharply and deliberately, and had plunged off the bridge with no more fuss than stepping off a curb. They'd noticed her hands on the wheel because of the white gloves she'd been wearing. (TBA: 3)

This passage sets up a series of modal-worlds, at different ontological levels (as shown in the text-world diagram in Figure 7.1). The policeman exists as a world-building element in the epistemic modal-world of Iris's narration. His speech act then triggers an epistemic modal-world, within which are two subsequent epistemic modal-worlds, one in which the tires are caught in a streetcar track, and one in which the brakes fail. (In Gavins' 2007 formulation of Text World Theory, only direct speech prompts a world-switch. However, Gibbons (2022) has cited instances of indirect speech as being world-building. I concur with Gibbons' interpretation, since claims made by the policeman have a different ontological status to claims made by narrator, regardless of whether Iris uses the policeman's exact words). In the moment of reading, the text therefore prompts the reader to create two distinct mental representations to conceptualise two discrete states of affairs. As we saw above however, Dancygier consolidates these two discrete text-worlds into a single 'accident space'. (This process appears analogous to the process I described with respect to the multiple scenarios describing Luke's death offered by Offred in Nuttall's reading of *The Handmaid's Tale* in Section 5.2.1). Alongside these two alternative states of affairs, Iris's testimony also prompts a deontic modal-world in which the policeman 'felt bound' to add more information. Within this is a subsequent epistemic modal-world prompted by the policeman's second speech act, and within this are embedded a series of further epistemic modal-worlds, describing events seen by, and claims made by, a pair of eyewitnesses. The policeman reports that the eyewitnesses said that 'Laura had turned the car sharply and deliberately', and also that the eyewitnesses 'noticed her hands on the wheel'. Readers may infer that the eyewitnesses also spoke of Laura's hands on the wheel, but this is not stated directly in text. The text-world conceptual structure anticipated by Text World Theory suggests that in the moment-by-moment experience prompted by careful reading, these mental representations are likely to remain discrete. Again, however, Dancygier appears to consolidate these discrete states of affairs into a single 'suicide' space.

In other words, Iris's testimony in this second paragraph prompts the creation of several discrete, mutually exclusive epistemic modal-worlds in which different reasons for Laura's death are

conceptualised. Though Dancygier describes her 'suicide' and 'accident' spaces as 'twin[s]' of each other, the alternative text-worlds which give rise to this consolidation are not directly equivalent. In Text World Theory, different modal-worlds can exist at different 'conceptual distances' from each other if different linguistic markers of epistemic modality are used to trigger them. Gavins illustrates this point by suggesting that a world prompted by the clause 'I think that' will be conceptualised as being further from its originating world than one prompted by the clause 'I'm certain that' (2007: 120-136). In Gavins' example, readers are likely to understand intuitively which world is conceived as closer to its source world. In Iris's testimony, however, the comparison is not so straight-forward. Accounts of Laura's accidental demise are presented within epistemic modal-worlds qualified with the tentative epistemic marker 'may'. In contrast, accounts of her suicide are doubly-embedded, firstly within a deontic modal-world triggered by a firm commitment with clause 'felt bound to inform me', and secondly within epistemic modal-worlds created by the testimony of the 'dependable' eyewitness testimony. One effect of these alternative framings may be to complicate the question of which state of affairs is conceived as closer to the source world. As I will demonstrate with my own data later in this chapter, readers do seem divided on which of these accounts to believe. The complexity and asymmetry of this conceptual structure may also be a significant factor which leads some readers to conclude that Iris's testimony is 'ambiguous, equivocal [and] obscure', as Goodreads reviewer GRTBA-17 claims.

This ambiguity is likely to contribute significantly to the narrative interest of the novel. Ryan has argued, from a possible worlds perspective, that a proliferation of mutually exclusive worlds increases a narrative's 'tellability' (1993: 148). However it is not, I suggest, the mere existence of these different scenarios that intrigues readers, so much as the fact that from the moment they encounter them, they are likely to engage in a conscious process of trying to decide which of these competing accounts most closely resembles 'reality' - i.e. the state of affairs in the initially empty world from which Iris narrates.

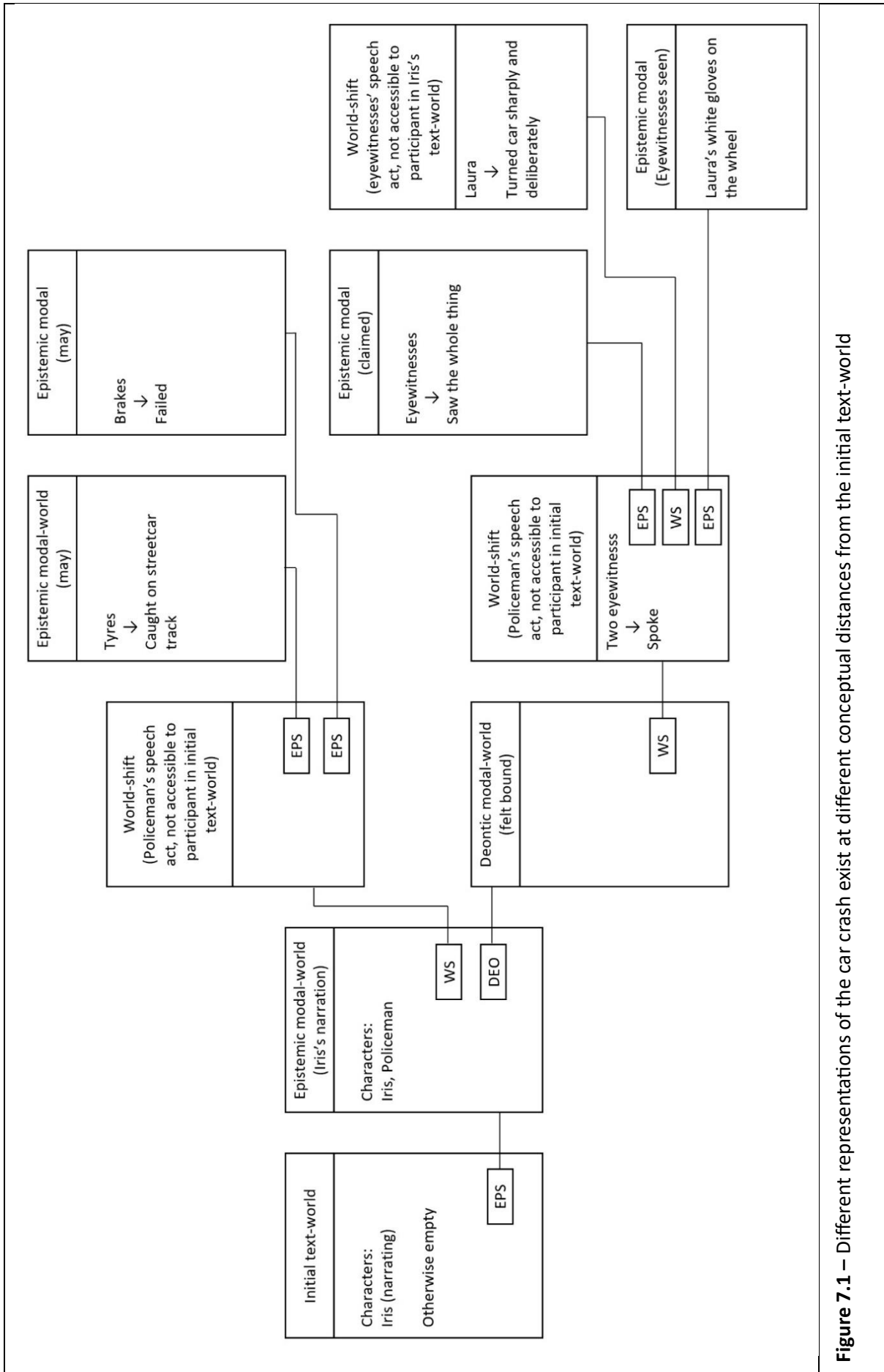


Figure 7.1 – Different representations of the car crash exist at different conceptual distances from the initial text-world

As the opening chapter of *The Blind Assassin* continues, readers encounter further information that may cause them to reassess the conceptual distance between the various established text-worlds. Paragraph three begins with Iris telling readers 'It wasn't the brakes, I thought'. This creates a negated epistemic modal-world, the antithesis of which has already been prompted by the policeman's testimony in the previous paragraph. The effect of this is subtle. By refuting just one of the possible explanations already put forward, the narrator makes no claims about which of the remaining explanations she does accept. Iris's claim that 'It wasn't the brakes' is satisfied in the state of affairs where Laura's tyre caught in a streetcar track, and this interpretation is consistent with Iris's subsequent declaration to the police officer that 'It was an accident'. Yet my instinct, upon reading this line for the first time, was to take this as a strong hint that the narrator was dismissing the possibility that Laura's death was accidental. As I will demonstrate in the following section, a significant majority - though not all - of the readers in my study drew a similar conclusion from the passage as a whole. This reading is hard to account for when we consider the complete text-world conceptual structure prompted by the passage, but more understandable if readers do consolidate their understanding of the text into two discrete 'accident' and 'suicide' spaces, as Dancygier's account implies. Chapter 1 does not provide unambiguous evidence about what Iris believes about Laura's death. Readers may form their own judgements about which of the modal text-worlds most closely resembles the state of affairs in the initial text-world, but - as with *Surfacing* - the conceptual structure prompted by Iris's testimony foregrounds the fact that such judgements are no more than inferences which may later be shown to be incorrect.

Iris's account of Laura's death, presented in the opening chapter, is followed by a newspaper report of the resulting inquest, signalled by a subheading 'The Toronto Star, May 26, 1945' and a headline 'QUESTIONS RAISED IN CITY DEATH' (TBA: 6). The overall discourse-world of the reading encounter, which represents the relationship between real-world author and real-world reader, remains unchanged. However, this shift in discourse type requires the reader to adopt a different stance with respect to the narrated events. A newspaper account, written in the third person, would

normally prompt the creation and population of an initial text-world with no empty text-world between reader and recounted events. As is typical in the journalism genre, the passive constructions in the headline ('QUESTIONS RAISED...') and the first line of the report ('A coroner's inquest has returned...') background human agency and perspective, adding to the impression that this text provides an accurate and objective account of the state of affairs it describes. Reading this newspaper report in isolation, readers would be likely to process it as they would process other examples of heterodiegetic narration, and 'accept and increment all the information' provided (Gavins, 2007: 131). However, because this newspaper report does not stand alone, readers must decide how to situate the initial text-world prompted by this textual fragment with respect to the mental representations they have already created. One strategy for doing this is to assume that the initial text-world prompted by the article corresponds to the initial text-world established by Iris's narration. Features of the text, such as the definite references 'the bridge' and 'the river', which would then serve as anaphoric references (Emmott 1997) to world-building elements in Iris's testimony, make this a plausible interpretive strategy, so long as the reader assumes that elements of Iris's testimony can themselves be safely mapped back into this initially empty text-world. In this scenario, readers would then increment any new information into their evolving representation of an initial text-world shared by both Iris's testimony and the newspaper report. Readers would also begin to populate a new text-world, at the same ontological level but with different spatial and temporal parameters, in which the inquest 'returned a verdict of accidental death', and 'Mrs Richard E. Griffen, wife of the prominent manufacturer, gave evidence'.

However, even if readers accept that the newspaper report provides an accurate description of this shared initial text-world, and subsequent world-switches at the same ontological level, the ambiguity surrounding the cause of Laura's death remains unresolved. A verdict of accidental death is no guarantee that Laura's death was indeed accidental. Moreover, by reporting the testimony given in the inquest, the *Toronto Star* excerpt prompts the creation of its own novel modal-worlds:

Mrs Richard E. Griffen, wife of the prominent manufacturer, gave evidence that Miss Chase suffered from severe headaches affecting her vision. In reply to questioning, she denied any possibility of intoxication as Miss Chase did not drink.

It was the police view that a tyre caught in an exposed streetcar track was a contributing factor. (TBA: 6)

Again, the version of events that Iris (Mrs Griffen) provides is carefully constructed. The claim that Laura suffered from 'headaches affecting her vision' invites readers - as it invites hearers at the inquest - to map this proposition into an existing mental representation of Laura's accident to infer cause and effect, but it is presented in a discrete modal-world, and readers need not consolidate it in this way.

In summary then, the process of comprehending these opening passages of *The Blind Assassin* involves not only assembling a series of discrete text-world representations prompted by specific linguistic cues in the text itself, but also of making (conscious or unconscious) decisions about which world-building and function-advancing propositions can be safely mapped between worlds at different ontological levels. Such mapping processes may occur automatically as part of ordinary reading processes, as happens in cases where readers treat the epistemic modal-worlds generated by a homodiegetic narrative as if they were accurate descriptions of the initial text-world. However, *The Blind Assassin* foregrounds and problematises such processes. As we see in the following discussion of reader responses to the novel, not all readers draw the same conclusions about what information can be treated as reliable, and safely mapped into the most ontologically prior world projected by the text.

7.3 - *The Blind Assassin* Reader-Response Study: Methodology

In the previous chapter, I reported the results of a study of 50 precis of *Surfacing* sourced from within my corpus of 100 reviews posted to the Goodreads website. This study revealed hints about the strategies readers adopt as they consolidate the many text-world and modal-world representations

created in the moment-by-moment experience of reading. However, because the data was recovered from spontaneously submitted reviews of a novel-length text, the conclusions I was able to draw from this data set were limited. In this section, I present the results of a more focussed reader-response study, in which summaries of shorter passages of *The Blind Assassin* were solicited under more controlled conditions. I begin by outlining the methodology of the study. I then report separately on two discrete analyses performed on two sub-samples of respondents, each of which were asked to respond to different textual prompts.

7.3.1 - Experimental Design

Respondents in this study were asked to complete an online survey. The survey was hosted on the Open University's *nQuire* platform (<https://nquire.org.uk/>): a freely accessible website designed to allow the public to design citizen science experiments, with precedents for generating publishable data sets (Fancourt et al 2020; Fancourt and Mak 2020). Several strategies were employed to recruit volunteers, including mailing lists, social media and promotion on the public-facing *nQuire* homepage. Respondents were randomly assigned to one of two experimental groups. They then followed the following protocol:

- All respondents were asked to submit basic demographic details: specifically gender, level of education and whether or not English was their first language.
- Respondents were asked to read a passage taken from the opening chapters of *The Blind Assassin* and then to summarise the passage in their own words:
 - Respondents in Group 1 were asked to read a passage taken from Chapter 1, comprising Iris's homodiegetic narration.
 - Respondents in Group 2 were asked to read the same passage as respondents in Group 1, plus the fictional newspaper report of the inquest into Laura's death from the following chapter.

- All respondents were asked to complete a set of true-or-false questions asking them about events in the text, and asked to indicate, from a closed list, which if any emotions the extract had prompted them to feel. These sections were administered after they had written their free text responses, to avoid shaping the content of their summaries.
- All respondents were asked to complete subsections of the 'Aspects of Literary Response' questionnaire (Miall and Kuiken 1995), designed to explore two reading motivations: 'story driven reading', and 'empathy'.

The prompt texts and a copy of the full questionnaire are included in Appendices A and B of this thesis.

I had two principal aims in gathering this data. My first was to compare the text-world conceptual structures of respondents' answers with the conceptual structures of the texts that prompted them. Such an exercise was not possible for the *precis* in my *Surfacing* corpus, since it is not practical to attempt a text-world by text-world analysis of an entire novel-length text, but was possible for these shorter extracts. By splitting my respondents into two groups, I intended to study the responses to a single passage of homodiegetic narrative, and then to investigate whether a subsequent passage of heterodiegetic narrative had an observable effect on responses to the same prompt text. My second aim was to explore whether any patterns I observed across my two data sets could be correlated with either demographic variables such as respondents' level of English Literature education, or their scores on the Aspects of Literary Response measures. In other words, I was keen to see whether I could find evidence to support the hypothesis that different reader strategies or dispositions led to distinct text-world consolidation behaviours.

7.3.2 - Profile of Respondents

184 respondents took part in the study. Of these, three respondents did not submit a free-text response when asked to summarise the passage they had read, and were excluded from the study.

This left a sample of 90 respondents in Group 1, and 91 in Group 2. The demographic breakdown of respondents is shown in Tables 7.1 and 7.2:

Table 7.1 - Gender of respondents			
	Group 1	Group 2	Total
Female	70	75	145
Male	15	14	29
Did not self-identify	5	2	7

Table 7.2 - Highest level of English study of respondents			
	Group 1	Group 2	Total
Completed / studying for postgraduate qualification in English Literature	11	14	25
Completed / studying for undergraduate qualification in English Literature	17	18	35
A level / equivalent	26	28	54
GCSE / equivalent	33	27	60
No formal qualification	3	4	7
Did not respond	0	0	0

As these results show, both respondent groups had a higher proportion of female and educated respondents when compared with the population as a whole; something that is hard to avoid in a self-selecting sample of this kind. However, the demographic breakdown was broadly similar across both respondent groups, minimising the chance of systematic bias between the two groups. A broader range of educational backgrounds was represented when compared with survey-based studies that have relied only on undergraduate volunteers (for example Bray 2007; Harrison and Nuttall 2018).

A small correlation was observed between female respondents and respondents who scored highly on the story-driven reading scale ($p=0.183$, $\sigma=0.018$): a finding not noted in Miall and Kuiken's original study (1995). Other than that, no significant correlations were noted between gender or level of education and respondents' responses to the text.

7.3.3 - Text-World Tallies: A Methodology

In this section I discuss my methodology for comparing the text-world conceptual structures of summaries written by survey respondents with the structures of the texts that prompted them. Before the investigation was begun, a text-world analysis of the prompt texts was undertaken, and each text-world assigned a unique identifier. Responses were then compared with the original text, and for each response it was noted:

- Which text-worlds and modal-worlds were recreated in the summary
- Whether the contents of text-worlds and modal-worlds (world-building elements and function-advancing propositions) were offered in the summary.

The following example is offered to illustrate how this coding process was applied. The prompt text included the line:

I could picture the smooth oval of Laura's face, her neatly pinned chignon, the dress she would have been wearing: a shirtwaist with a small rounded collar, in a sober colour: navy blue, or steel grey, or hospital-corridor green. (TBA: 4)

This fragment of narration prompts the creation of an epistemic modal-world signalled by the phrase 'I could' (world 34), and an epistemic modal-world prompted by 'picture' (world 35). The latter epistemic modal-world is populated with the world-building elements Laura, and the dress she is wearing. Two further epistemic modal-worlds (world 36 and world 37) are then evoked, in which Laura's dress is 'steel grey' or 'hospital-corridor green' rather than 'navy blue'.

A summary which included the line: 'She goes on to imagine the outfit her sister would have chosen for her last action: neat chignon, pearls, a shirtwaist dress of muted colour' (Respondent 1-64) was coded as invoking world 35 (since the word 'imagine' prompts an epistemic modal-world), and as

mentioning the contents of world 35. It was not coded as invoking world 34, since no epistemic marker indicating possibility is present. Worlds 36 and 37 were also marked as absent.

A summary which included the line: 'The driver of the car wore [white gloves and...] either a green, navy-blue or steel grey dress as was her style' (Respondent 1-80) was coded as mentioning the *contents* of worlds 35, 36 and 37. It was not coded as invoking the *presence* of worlds 34, 35, 36 or 37, since no markers of epistemic modality were present. (In other words, the respondent presented the contents of the original modal-worlds as factual statements about an ontologically prior world).

It should be acknowledged that a degree of subjective judgement was sometimes needed to produce codings for all 90 summaries in the data set. Some particular issues were noted:

- Several instances were spotted of sentences that could be parsed in more than one way.

For example:

Two dependable witnesses saw her drive through the 'danger' sign on a bridge implying that she drove deliberately over it. (Respondent 1-68)

Here it is not clear whether the word 'implying' refers to a speech or thought act on the part of the 'dependable witnesses' or an inference made by the reader.

- Several respondents submitted responses with grammatical errors or other unconventional linguistic features. For example:

The writer receives a phone call informing her that her sister has been killed in an accident(?) (Respondent 1-88)

In this response the bracketed question mark is deviant, since it follows a declarative rather than an interrogative sentence. At least two interpretations are possible; that that the respondent is querying whether Laura's death was an accident, or the respondent is querying the factuality of the entire statement.

In cases such as these (representing a small minority of coding decisions), a judgement was made as to which of two or more possible interpretations was intended. Therefore, while this methodology does, I suggest, provide a valuable way of spotting broad trends across a large sample of reader summaries, small differences between individual results should be treated with caution. One way to improve this approach in a subsequent study would be to have two or more analysts code responses separately, and discuss any discrepancies that occur. (For discussion of the benefits and problems of using multiple analysts to improve the reproducibility of stylistic analyses see Voice et al, forthcoming).

7.4 - Group 1 Results

In this section I present the findings from Group 1 respondents, who saw only Iris's homodiegetic narration. As in previous chapters, free-text responses from respondents are reproduced verbatim, without [sic] labels to indicate correctly transcribed errors.

7.4.1 - Group 1 World Tallies

The results of the world-tallying exercise for Group 1 respondents are presented in Table 7.3. Details of how each unique identifier relates to the source text are given in Appendix C. In this example, the empty text-world from which Iris narrates is not considered, since all but one of the respondents transposed their accounts into the third person.

From this data, several broad trends are clear:

- All respondents produced summaries which recreated only a minority of worlds prompted by the source text. No respondent recreated more than 20 of the 42 worlds prompted by the source text, and the average number of recreated worlds was 4.5.
- The text-worlds and their constituent contents (world-building elements and function-advancing propositions) prompted by the source text are not included with equal

frequency by respondents in their summaries. Some worlds and contents are significantly more likely to be invoked than others.

- The common disparity between the frequency with which a world was recreated and the frequency with which its contents were included suggests that the mapping of world-building elements and function-advancing propositions from one text-world or modal-world to another is a common process which occurs as narratives are remembered and recalled. I discuss these consolidation processes in detail in the following sub-section.
- The two most frequently recreated text-worlds were also the worlds whose contents were included most frequently. These worlds were two of the epistemic text-worlds created directly by Iris's narration - worlds which emerge directly from the initial empty text-world and sit closest to it. These corresponded to the two most richly described 'scenes' in the prompt text, and which were invoked by the initial lines of the first two paragraphs:
 - World 1, prompted by: 'Ten days after the war ended, my sister Laura drove a car off a bridge', (invoked by 92% of respondents)
 - World 3 prompted by: 'I was informed of the accident by a policeman', (invoked by 69% of respondents)

However, not all the worlds at this ontological level were frequently recreated. For example, world 4 - a world-switch prompted by the shift to the past perfect tense in 'they'd traced the licence' - was recreated and its contents listed by only 5 respondents (6%) in each case.

Table 7.3 - Frequency with which worlds and their contents were recreated in Group 1 responses. (The ten most frequently included worlds are shaded for clarity.)

World	World invoked	Contents Included	World	World invoked	Contents Included
1 – TW	84	84	27 – Epis	5	5
3 – WS	63	63	12 – Epis	7	4
10 - Speech	10	46	39 – Blend	4	4
13 - Speech	26	41	18 – NEG	2	4
33 – NEG	3	33	36 – Epis	2	3
28 – Epis	16	28	37 – Epis	2	3
35 – Epis	13	23	14 – Blend	2	2
20 – Boul	1	22	25 – Deo	2	2
32 - Speech	19	21	29 – Blend	3	2
21 – Boul	17	18	38 – NEG	2	2
15 – Epis	14	16	26 – Blend	3	2
31 – Boul	0	15	16 – Epis (N)	1	1
42 – Blend	13	13	24 - Speech	18	1
17 – WS	11	12	6 – Speech	11	0
2 – NEG	6	11	30 – Speech	8	0
22 – Epis	1	10	11 – Speech	1	0
5 – Epis	2	10	19 – Epis	1	0
41 – Blend	10	8	23 – Blend	0	0
8 – Epis	5	7	9 – Deo	0	0
4 – WS	5	5	34 – Epis	0	0
7 – Epis	8	5	40 - Blend	0	0

- Of the 42 worlds prompted by the extract, four were not recreated by any of the 90 respondents in the sample. Of these, two worlds were triggered by clauses corresponding to linguistic ‘hedges’, in which statements undergo ‘qualification and toning down’ through the use of linguistic features including modal qualifiers (Wales 2014: 197). For example in response to the prompt text excerpt ‘he also felt bound to inform me that two eyewitnesses...’, ten respondents reflected the fact of the policeman’s indirect speech, but none did so by framing this within a deontic modal-world:

- he said there were 2 eye witnesses (Respondent 1-33)
- but follows up with information that two reliable eyewitnesses
(Respondent 1-64)

The other example of a linguistic hedge that was not represented among the responses occurred in the prompt text excerpt ‘I could picture the smooth oval of Laura’s face, her neatly pinned chignon...’. Of the 23 respondents who included a physical description of Laura in their summaries, 13 framed this as something the narrator had imagined, but none included an epistemic modal-world to reflect the fact she was able to do this:

She goes on to imagine the outfit her sister would have chosen for her
last action: neat chignon, pearls (Respondent 1-64).

A third world, corresponding to the hedge prompted by the verb ‘suppose’ in the clause ‘I suppose you want someone to identify her’, was reproduced by only one of the 90 respondents.

This world tallying exercise, while providing only a crude look at trends across the sample, does appear to demonstrate a broad principle. Perhaps unsurprisingly, it reveals that a large amount of detail is lost in respondent summaries, with only a small minority of worlds and/or their contents being invoked by more than half the respondents in the study. Clearly, one strategy employed by respondents when summarising narratives is simply to omit significant amounts of information. The fact that only a small number of worlds were omitted with low frequency supports the suggestion made in the previous chapter (and by Emmott 1997) that there is a core of essential information that must be understood and remembered in order to comprehend a narrative. However, this study did not reveal a clear distinction between a set of core worlds and a second set of subsidiary ones. Instead, the distribution of invoked worlds followed more of a 'long tail' pattern (Anderson 2007), with most respondents mentioning the most popular worlds, and a steadily decreasing number of respondents mentioning less commonly recreated ones (See Figure 7.2)

In the following sub-section I discuss some of the consolidation strategies that respondents adopted which account for discrepancies between the worlds that were recreated, and the world-building and function-advancing propositions that were invoked.

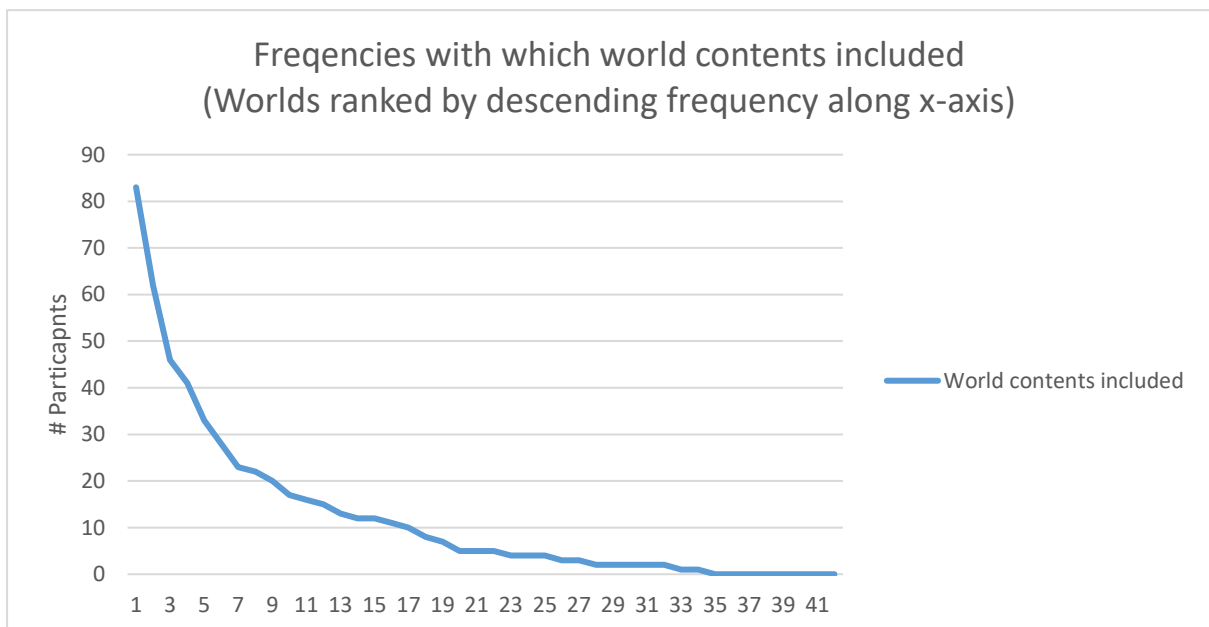
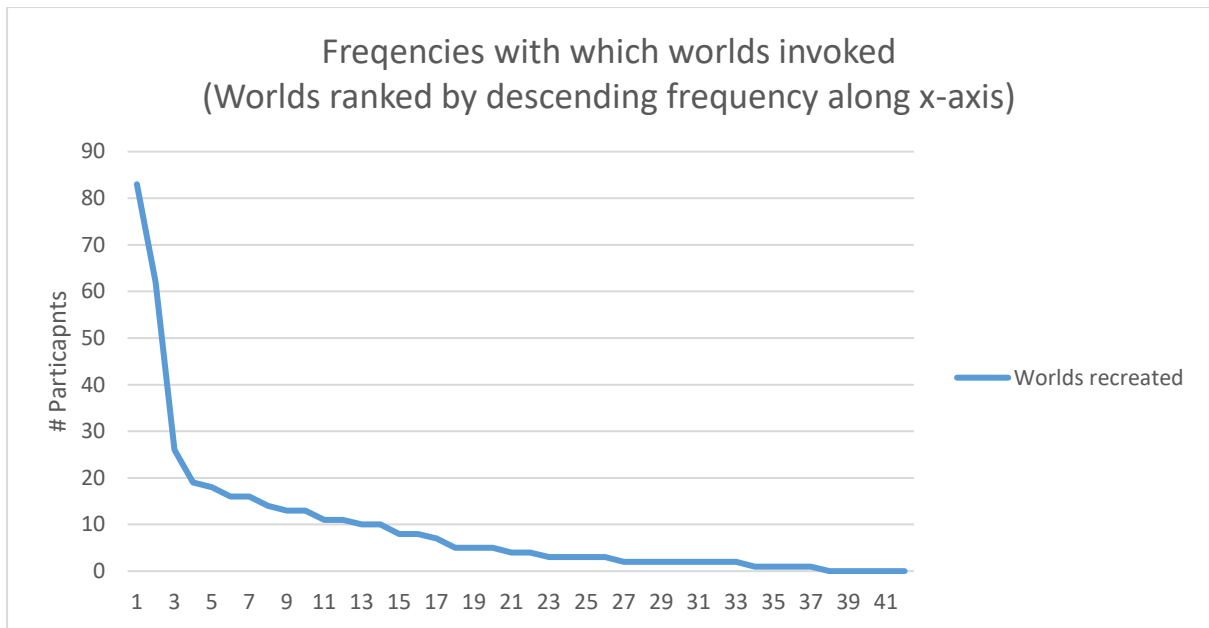


Figure 7.2 - Frequencies with which worlds and world-contents were included in participant summaries

7.4.2 - Group 1 Text-World Consolidation Strategies

In the Group 1 data set, there were many examples of respondents producing summaries in which world-building elements and function-advancing propositions were transposed from one text-world or modal-world to another. In this sub-section, I discuss several recurring patterns. Here I restrict

myself to a small number of examples for brevity. In Appendix D I provide a more extensive list of examples to demonstrate that the phenomena I report here were observed frequently across my data set.

7.4.2.1 - Removal of modality

One of the most commonly observed patterns in this data set was the transposition of text-world contents from a modal-world to a text-world or modal-world at a prior ontological level. Frequently, this resulted in respondents reporting events that were presented to them as the perceptions or beliefs of particular characters as if they were facts in initial text-world from which Iris narrates.

One example of this can be seen with respect to the following line in the prompt text, which constructs an epistemic modal-world:

I could hear the calmness of my own voice (TBA: 3)

In total, 10 respondents (11%) made reference to the narrator's manner in their summaries. Of these, just one did so by recreating an epistemic modal-world:

She could hear that her voice was calm (Respondent 1-33)

The remaining respondents reported the narrator's calm demeanour as a fact in the initial text-world. As well as representing a consolidation of the text-world conceptual structure, these examples also illustrate a shift in point of view, from Iris's perspective to an external one.

- The writer was calm and composed when dealing with the police (Respondent 1-3)
- The narrator is outwardly calm (Respondent-1-27)

A second example of this phenomenon was offered in response to the following excerpt from the prompt text, which prompts the creation of a negated epistemic modal-world:

His tone was respectful: no doubt he recognized Richard's name. (TBA: 3)

In total, 10 respondents (11%) made reference to the character Richard, who is not mentioned elsewhere in the Group 1 prompt text. Two did so by recreating an epistemic modal-world, albeit one which was not negated:

- The policeman was polite and considerate 'probably because he recognised Richard's name' (Respondent 1-43)
- A woman is being told by a police man, who may have heard of her husband Richard (Respondent 1-89)

The remaining respondents reported Richard's existence as a fact in the initial text-world:

- The woman is married to a person called Richard who is of some note. (Respondent 1-74)
- Sister, married to well-known Richard [...] (Respondent 1-4)

These examples are significant because they demonstrate that, in addition to mapping world-building information about Richard into their initial text-world representation, respondents also made inferences about the character - specifically that he was famous, and that he was married to Iris - neither of which is stated in the prompt text. Indeed, respondent 1-43 made explicit reference to their inference in their summary:

I presume from this that Richard is the narrator's husband, and that he has some degree of celebrity and status. (Respondent 1-43)

Further examples of this consolidation strategy are listed in Appendix D.

7.4.2.2 - Removal of modality: simplifying chains of embedded worlds

Here I discuss an example of mappings from modal-worlds to worlds of prior ontological status which I believe is worthy of particular attention. It concerns the passage from the prompt text which I discussed in Section 7.2:

...but he [the policeman] also felt bound to inform me that two witnesses - a retired lawyer and a bank teller, dependable people - had claimed to have seen the whole thing. They'd said Laura had turned the car sharply and deliberately, and had plunged off the bridge with no more fuss than stepping off a curb. They'd noticed her hands on the wheel because of the white gloves she'd been wearing. (TBA: 3)

This passage is significant for prompting the creation of a succession of embedded modal-worlds: three epistemic modal-worlds representing the eyewitnesses' claims, prompted by the words 'claimed', 'said' and 'noticed', embedded within an epistemic modal-world representing the policeman's testimony. These worlds are then embedded within a deontic modal-world triggered by the policeman's hedge ('he felt bound'), though as we have seen, this deontic modal-world was not recreated in any of the testimonies.

This succession of embedded epistemic modal-worlds corresponds to a phenomenon Zunshine (2003, 2006, 2007, 2015) refers to as modelling multiple 'levels of intentionality', in which discourse respondents are able to model what characters believe about other characters' beliefs. In this extract, the policeman does not reveal his own belief about Laura's death, but instead reports what he believes

about what the eyewitnesses believe (a belief which is itself embedded within Iris's testimony).

Responding to this prompt, respondents adopted a number of discrete strategies:

- Some respondents recreated the doubly-embedded epistemic modal-world structure:

The officer also suggested that, according to two witnesses, it may have been intentional as the witnesses thought she have turned the steering wheel into the railing. (Respondent 1-76)

- Some respondents simply stated the suggestion that Laura's death was a suicide as a fact in the initial text-world, avoiding any modal-world-builders in their summary:

A car was driven off a bridge by someone who knew what they were doing.
(Respondent 1-19)

- Other respondents presented the information within a single epistemic modal-world, removing *either* the policeman *or* the eyewitnesses from the chain of embedded mental states:

- Witnesses have stated that the act appeared deliberate, they could see her sister's hands on the wheel of the car as she was wearing white gloves. (Respondent 1-29)
- The officer presumes the accident was a suicide (Respondent 1-69)
- The police speak to her sister and seem to suggest it was intentional
(Respondent 1-71)

Further examples of these consolidation strategy are given in appendix D.

While the examples from respondents 1-29, 1-69 and 1-71 all represent mappings from a modal-world into the world that gives rise to it, responses such as those offered by Respondent 1-19 represent mappings into text-worlds which are ontologically further removed. If we draw on Fauconnier's metaphor of 'parent' spaces, which he introduces when describing his mental space

model (1985: 17), then such responses demonstrate that respondents appear to be mapping world contents not only into parent text-worlds, but also into grandparent- and great-grandparent text-worlds.

As I have already noted, no respondents repeated in full the complete sequence of embedded modal-worlds, including the deontic modal-world cued by the clause 'he also felt bound to inform me'. This might be a result of a tendency to simplify conceptual structures prompted by hedges, as already discussed. However, when discussing the recursive embedding of character beliefs, Zunshine (2006: 28), drawing on the work of Dunbar (1996), suggests that humans may have an innate limit on the number of levels of intentionality they can easily model during discourse processing. This may be another factor which affects text-world consolidation during the reading and recall of complex narratives, placing a limit on the number of mutually embedded text-worlds that appear frequently in reader summaries. The survey I report here was not designed to test this systematically, but this provides a hypothesis which could be explored in future work.

7.4.2.3 - Consolidation of worlds at the same ontological Level

When discussing Dancygier's analysis of *The Blind Assassin* in Section 7.1.1, I suggested that her reading demonstrated a tendency to consolidate multiple explanations offered to account for Laura's accidental death into a single 'accident' narrative space. This behaviour was observed frequently across my data set. The following excerpt from the prompt text cues the creation of two conflicting epistemic modal-worlds:

He [the policeman] said the tires may have caught on a streetcar track or the brakes may have failed (TBA: 3)

Some respondents replicated this conceptual structure when reporting the policeman's beliefs:

The policeman had suggested that the car may have failed in some way, the brakes or got caught on metal track (Respondent 1-33)

However, other respondents reported the policeman's claim in language which prompted just a single 'accident' modal-world:

- The police officer suggests that it could have been an accident (Respondent 1-10)
- The policeman says it may have been an accident (Respondent 1-14)

As well as consolidating two conflicting modal-worlds into a single modal-world, the responses offered by respondents 1-10 and 1-14 are notable for the way in which the respondents reframe two discrete function-advancing propositions ('the tyres... caught on a streetcar track' and 'the brakes... failed') by bracketing both as examples of accidents, suggesting that schematic knowledge is playing a role in the consolidation process.

7.4.2.4 - 'Modal generalising'

In my discussion of precis of *Surfacing* in the previous chapter, I noted how some respondents reported desires which the source text attributed to a single character by suggesting that these desires were shared by a larger group. Similar patterns were observed in my *Blind Assassin* survey data. In Atwood's original text, Iris is informed of Laura's death by 'a policeman'. However, 14 of the 90 respondents (16%) included in their summary a world-switch or modal-world attributed to 'the police' rather than to an individual officer:

- the police say there will be an inquest (Respondent 1-28)
- '[The sister] assumes the police would like someone to identify the body.
(Respondent 1-80)

This pattern can also be seen when comparing how different respondents reported the claims made by the eyewitnesses:

- two reliable witnesses say it [Laura's car] was deliberately driven off the bridge
(Respondent 1-22)
- in what witnesses claim and the narrator accepts was a deliberate suicide
(Respondent 1-16)
- [...] the death of her sister who appeared to have deliberately driven off a bridge.
(Respondent 1-11)
- It is suspected that Laura committed suicide (Respondent 2-17)

Here, respondent 1-22 provided precise details about the number of witnesses, and emphasised that they were 'reliable' (a synonym of 'dependable'), thus echoing the source text closely. Respondent 1-16 offered the more general summary with the phrase 'witnesses claim', giving no suggestion that the witnesses were individuals with particular perspectives or temperaments, and instead inviting an implicit assumption that anyone witnessing the accident would have drawn the same conclusion. Respondent 1-11 provided a summary in the passive voice, claiming that Laura 'appeared to have deliberately driven off a bridge' without invoking an agent responsible for perceiving the event; a construal which also implies the interpretation is one which would be generally accepted. Respondent 2-17 (from Group 2) offered the passive construction 'It is suspected that', again suggesting a universal or widely held belief.

This data - which echoes findings from my *Surfacing* study - suggests that this process of 'modal generalising' is one which may happen as part of text-world consolidation processes, as readers substitute modal-worlds belonging to particular characters with worlds representing more

widely or universally held beliefs. Further examples of this consolidation strategy are given in Appendix D.

7.4.2.5 - Removal of negation

Another common consolidation strategy observed in my survey data was the reframing of states of affairs presented in a negated text-world as events that were positively construed at a prior ontological level. This pattern can be seen in respondents' responses to the following excerpt from the prompt text, in which Iris describes Laura's crash:

Nothing much was left of her but charred smithereens. (TBA: 3)

In Group 1, 11 respondents (12%) gave a description of Laura's body after the accident. Of those, six did so by invoking a negated text-world:

- The car falls into the ravine below, passing through the 'feathery' treetops before hitting the ground below and catching fire, leaving nothing but charred remains. (Respondent 1-64)
- There wasn't much left of the body (Respondent 1-65)

The remaining five respondents described Laura's body without prompting a negated text-world:

- the body was burned and charred (Respondent 1-68)
- Sections of the bridge fell onto what was left of the car and she was 'smashed to smithereens'. (Respondent 1-39)

Here, the response of Respondent 1-39 is particularly interesting, as they placed the clause ‘smashed to smithereens’ in quotation marks; a punctuation choice that would normally imply a direct quote from the source material. In fact, Respondent 1-39 reproduces neither the original words nor a response that prompts the same conceptual structure as the original text. One possible explanation for this is the replication of the word ‘smithereens’, which is foregrounded by virtue of being unusual. (‘Smithereens’ occurs just 26 times in the British National Corpus (<https://www.english-corpora.org/bnc/>), a 100-million-word collection of written and spoken texts which was compiled with aim of providing a representative sample of British English use. By this measure, ‘smithereens’ is among the least common words in the prompt text). If this is the case, it suggests that the linguistic token ‘smithereens’ forms an integral part of Respondent 1-39’s mental representation of the state of affairs described by Atwood’s text. I discuss the implications of this further in the following chapter.

It is useful to compare the response of Respondent 1-39 with that of Respondent 1-65. Respondent 1-65 does not use the words ‘charred’ or ‘smithereens’ in their summary. Instead, by reporting that ‘nothing much was left of her body’, their summary prompts the creation of a negated text-world that contains no world-building elements or function-advancing propositions. However, the existence of this negated text-world appears as part of the conceptual structure of their mental representation of the scene.

Further examples of this consolidation strategy are given in Appendix D.

7.4.2.6 - Application of schematic knowledge

In Section 6.2.3.5, I suggested that readers drew on schematic knowledge (Section 2.2.2) when creating precis of *Surfacing*. While this survey was not designed to explore how readers consolidated information from disparate parts of a novel-length narrative, I nonetheless observed evidence that schematic knowledge was shaping respondents’ summaries of my prompt texts. The first example is evident from responses written by a small number of readers who described the conditions in which

Iris learned the news of Laura's death. The relevant text-world is established in the prompt text with the following line:

I was informed of the accident by a policeman (TBA: 3)

This line prompts the creation of a text-world populated only by an enactor of the narrator and an enactor of the policeman. The function-advancing proposition 'I was informed...' implies that the two characters are engaged in discourse. However, despite the fact that face-to-face communication is arguably the most prototypical form of communication, four of the 90 Group One respondents (4%) explicitly mentioned a 'phone' or 'telephone' in their summaries:

- The narrator, Mrs Griffen, receives a telephone call from a policeman (Respondent 1-5)
- The writer receives a phone call informing her that her sister has been killed (Respondent 1-88)

In addition, several more phrased their summaries in a way which implied a phone call had taken place:

The narrator is called by a police officer who explains [...] (Respondent 1-10)

While such responses were in the minority, it seems unlikely that so many similar reports occurred simply as a result of careless reading on the part of respondents. A more likely explanation is that at least some respondents shared similar schematic representations in which bad news is commonly delivered over the telephone, and they drew upon these when constructing their responses.

A more significant example which potentially demonstrates the application of schematic knowledge came in response to the following extract from the prompt text:

“I suppose you want someone to identify her,” I said. (TBA: 4)

This sentence prompts the creation of an embedded set of modal-worlds: a boulomaic modal-world prompted by ‘you want’, within an epistemic modal-world prompted by ‘I suppose’, which are both contained within the text-world prompted by the instance of direct speech. Only a minority of respondents produced a summary which approximated this conceptual structure:

The sister [...] assumes the police would like someone to identify the body. (Respondent 1-80).

The response from respondent 1-80 contains the words ‘assumes’ and ‘would like’ which act as world-builders of epistemic and boulomaic modality. This can be contrasted with the following responses:

- She accepts however that she will have to go and identify the body (Respondent 1-5)
- She will need to go to identify the body. (Respondent 1-76)

In these responses, the clauses ‘she will have to...’ and ‘she will need to...’ prompt the creation of deontic rather than boulomaic modal-worlds. Of the 23 Group 1 respondents who made reference to Iris identifying Laura’s body, four did so using language that prompted a deontic modal-world. Again, while this represents only a small percentage of the total sample, it is a pattern that is replicated. One explanation for this is that those respondents who made similar substitutions were drawing on schematic knowledge of identifying a body being an unpleasant task that has to be done after a death.

The hypothesis that schematic knowledge often leads to modal reframing is one that could be tested empirically with further study.

It is worth making one final observation about the application of schematic knowledge here. In my analysis of *Surfacing*, I presented examples which I suggested were evidence of readers combining events from different parts of the novel and reconstruing them in terms of larger scale knowledge structures. Similar patterns were not noticed in the data from this study. One possible explanation for this was that this tends to be a consolidation strategy which is used to comprehend longer units of discourse. However, it is also possible that readers drew upon existing schemas (such as an understanding of 'murder mystery' or 'family drama' genres), and that this influenced the content they included in or omitted from their summaries, even though they provided no textual evidence of this process. This is a hypothesis that could be tested in further studies; perhaps by asking respondents to summarise narrative extracts and priming different groups to read the same text in different ways.

7.4.2.7 - Narrative re-ordering

In the previous chapter, I noted how a small minority of respondents produced precis of *Surfacing* in which events were recounted not in the order they were presented in the novel, but in their correct chronological order. Results from this study provided an unexpected counterpoint to this finding. In my *Blind Assassin* prompt text, the two core 'scenes', separated by the world-switch between paragraphs one and two, and replicated most frequently by respondents, are presented in their correct chronological order. Firstly Iris informs readers of Laura's death, and then she informs them of the moment she learns about the event. This sequence of events was replicated in some summaries:

The narrator's sister drives off a bridge, and a policeman informs her of this. (Respondent 1-17, summary replicated in its entirety).

However, of the 59 respondents in Group 1 whose summaries prompted the creation of two distinct text-worlds to encapsulate these two events, 32 recounted Iris's conversation with the policeman first:

- The narrator, Mrs Griffen, receives a telephone call from a policeman to inform her that her sister has died when the car in which she was driving went over the side of a bridge and plunged down through trees into a deep ravine (Respondent 1-5)
- The narrator is called by a police officer who explains that the narrator's sister has driven off a cliff, and in the process, killed herself. (Respondent 1-10)

Both examples prompt a clear world-switch with a change from present to past tense to describe the accident. Moreover, in both cases the report of Laura's death is framed as a claim made by the policeman, rather than as a description offered directly by Iris herself. (Thus, I read the presence of indirect speech here as world-forming, since the claims made by the policeman do not have same ontological status as Iris's unqualified claims about the world from which she narrates.)

These changes have a particular significance for the point of view conveyed in these summaries. Virtually all the respondents made a switch from first person to third person reporting in their summaries, implying a shift from an internal to an external perspective. However, a significant number also produced summaries which recounted events in the order the narrator became aware of them, rather than the order in which they were related in the prompt text: a reconstrual which appears to have the opposite effect. This example demonstrates how text-world conceptual structure can be important for conveying point of view in narrative, and provides further evidence that shifts of point of view may play a role in text-world consolidation as narratives are remembered and recalled. However, we note from the contrasting examples offered in this chapter and the previous one that such consolidations do not always have the same effect. Some readers, on at least some occasions, consolidate experiential accounts to create chronological summaries, and some readers, on at least

some occasions, consolidate chronological accounts to produce summaries that reflect the experiences of particular characters.

However, one further result suggests that reader propensity may play a role in this process. A correlation was observed between respondents who related events in the same order as the prompt text and respondents who scored more highly on the 'story-driven reading' metric ($p=0.381$, $\sigma=0.01$). In other words, readers who scored lower on this metric were more likely to re-arrange events and present them from Iris's perspective. Attempting to replicate this finding with other texts or under different experimental conditions would be a useful avenue of further enquiry.

7.4.2.8 - Summary of consolidation strategies

In Section 7.4.2 I have provided evidence of different strategies that respondents used to alter the text-world conceptual structure of a prompt text when producing a summary. Frequently, such strategies involved a reduction in the number of text-worlds, as text-worlds and their contents were omitted in their entirety, or the contents of modal-worlds were mapped into ontologically prior worlds: a process I described in the previous chapter as 'ontological simplification'. However, such conceptual structure simplification does not appear to be the only process at work. Processes such as narrative reordering and modal generalising appear to involve changes to point of view as respondents write summaries. The application of schema knowledge also appears to affect the conceptual structure of summaries, as well as the specific world-building elements and function-advancing propositions that are recalled.

7.4.3 - Novel Text-Worlds in Group 1 Responses

In my discussion of precis of *Surfacing*, I suggested that in addition to simplifying and consolidating an existing text-world conceptual structure when summarising a narrative, reviewers also produced novel text-worlds and modal-worlds that were not prompted explicitly by the original text. The same pattern was noticed in my *Blind Assassin* survey data. Two distinct types of novel world were found.

The first was an epistemic modal-world representing the beliefs of a particular character. As I have already noted, Iris does not present the reader with an unambiguous statement about whether or not she thinks Laura took her own life, though she does recount telling the policeman that the death was an accident. However, a significant number of respondents in Group 1 included a claim that Iris believed the death to be deliberate:

- The narrator is herself convinced that her sister did commit suicide (Respondent 1-5)
- she knew it was suicide but was pretending to the police that it wasn't (Respondent 1-34)

In contrast, other respondents reported that Iris believed the death to be an accident:

- however, she believes it was an accident (Respondent 1-46)
- however, she doesn't believe that Laura has killed herself (Respondent 1-8)

Similarly, respondents reported that the policeman (or 'the police' more generally) believed the death to be deliberate, despite Iris's testimony recounting how the policeman offered conflicting verbal accounts of the crash:

The officer presumes the accident was a suicide (Respondent 1-69)

These results echo findings by Whiteley (2010, 2011), which suggest that 'mind-reading' (Baron-Cohen 1997, Zunshine 2003, 2006) or 'mind-modelling' (Stockwell 2009a, 2022) forms a significant part of the process of narrative comprehension. Discussing responses to examples of underreporting in Kazuo Ishiguro's fiction Whiteley argues:

inferential processes [...] are important in the construction of the text-worlds of *The Remains of the Day*. Stevens' unreliability, manifest in his tendency to deny or omit information [...] means that throughout the novel readers are engaged in making inferences regarding his mental states, beliefs, emotions, intentions and so on. (Whiteley 2010: 111)

While Whiteley's analysis focusses primarily on how readers rely on inferences to empathise with characters, responses from my data set suggest that narrative comprehension involves processes of adding elements to text-world conceptual structures to represent specific beliefs of fictional characters.

A second kind of novel world was included in summaries to represent the views of respondents themselves, as they expressed varying degrees of certainty or uncertainty about the inferences they were making:

- The novel appears to be set in America and there is a suggestion of 1950's (Respondent 1-13)
- This may have been an accident, but was probably suicide. (Respondent 1-31)

As in the *Surfacing* study, respondents frequently used the first person plural 'we' to refer to inferences they believed other readers would concur with. A minority distinguished these from inferences marked with the first person singular, suggesting that respondents were aware that these were more personal inferences, or individual failures to comprehend the text:

- We are unsure whether it was an accident or not (Respondent 1-37, my emphasis)
- The story is taking place during the WWII era, I assume in England. [...] The reference on the way her sister used to dress - like she was being locked up - makes a direct

- connection to a mental institution, making us believe that she suffered from mental-ill health. (Respondent 1-46, my emphasis)
- She accepts however that she will have to go and identify the body, though it is not clear to me how she will do this if there are only charred remains. (Respondent 1-5, my emphasis)

Such worlds were frequently used to offer theories or speculations about non-narrated events that might account for the events described by Iris. The following examples show how both modal verbs, verbs of thought or perception and shifts in tense create novel worlds that are clearly distinct from the respondent's accounts of worlds prompted by the source text:

- Two bank employees witnessed her gloved hands on the wheel making no attempt to [steer] away from the danger- but could she have been gripped by fear? had the brakes been tampered with?' (Respondent 1-4, my emphasis)
- the narrator also says that the white gloves are symbolic of her "washing her hands of all of us". This implies some kind of family/sibling fallout that happened prior' (Respondent 1-50, my emphasis)

Responses such as these re-enforce the suggestion made in Chapter 6 that self-consciously tentative inferences form a significant part of readers' long term mental representations of narratives. Many of the responses presented here are also significant because they represent inferences that are clearly attempts to understand states of affairs in the initial (empty) text-world, rather than attempts to understand Iris's account of events. For example, when Respondent 1-37 reports that 'we are unsure whether it was an accident or not', their answer implies that the circumstances of Laura's death exist independently to Iris's account of them, and could in theory be known.

Further examples of novel worlds invoked by respondents can be found in Appendix D.

7.4.4 - Quantitative Analyses

In addition to analysing individual responses, the data were examined for possible correlations between the respondents' age, gender and 'aspects of literary response' scores, and the appearance of particular features in their free text summaries. The features examined were:

- Whether respondent summaries prompted modal-worlds, or described only events at an initial text-world level.
- Whether respondents included an explicit statement of the narrator's belief about the cause of the accident.
- Whether respondents recounted events in the order in which they were presented in the source text, or in the order in which Iris experienced them.
- Whether respondents presented summaries that acknowledged Iris's act of narration, or presented summaries equivalent to summaries of a heterodiegetic text.

However, other than the relationship already reported between respondents' tendency to reorder summaries and their scores on the 'story-driven reading' metric, no significant correlations were observed.

The data were also examined for possible correlations between features of reader summaries and the emotions readers indicated they had experienced while reading the extract. Again, no correlations were observed. Several explanations may account for this. Of course, it is possible that no causal relationship exists between these variables in wider reading contexts. However, it should be remembered that the scenario in which respondents encountered the prompt text in this survey was highly atypical. Firstly, they only read a short extract of a much longer work. Secondly, they then read this extract in the context of an academic study, which is likely to have shaped the type of reading they engaged in. (I noted possible implications of this in my discussion of experimental and naturalistic

studies in Section 4.1.2.5). In future studies it may be worth exploring alternative ways of attempting to elicit details of readers' emotional responses to narratives. In this context, the work of Kuijpers (2024) on adapting questionnaire-based measures of 'storyworld absorption' to analysing online discussion data might be productive.

Similarly, further considerations of how participants' backgrounds - and in particular their previous experiences of reading literature in educational contexts - might be useful.

7.5 - Group 2 Results

In this subsection, I present the results of analysis of data from Group 2 respondents. Group 2 respondents saw an alternative prompt text, containing the same passage of Iris's narration as Group 1 respondents (Extract 1), but also a fictionalised newspaper account describing the inquest into Laura's death taken from Chapter 2 of the novel (Extract 2). This altered stimulus had the potential to affect respondent summaries in at least two significant ways. Firstly, as the prompt text was longer, it presented greater demands on the memory. Secondly, because much of the information presented in Extract 2 replicated, reframed or contradicted information presented in Extract 1, the additional material had the potential to cause respondents to update the mental representations they generated in response to Extract 1, prompting episodes of world-repair. Before discussing respondent behaviour in detail, a brief analysis of the text-worlds created in response to the juxtaposed extracts is useful.

7.5.1 - Reframing Iris's Narration: Text-Worlds and Multiple Voices in *The Blind Assassin*

Extracts 1 and 2, taken from the opening two chapters of *The Blind Assassin*, juxtapose passages of homodiegetic and heterodiegetic narration. Extract 2 begins as follows:

The Toronto Star, May 26, 1945
QUESTIONS RAISED IN CITY DEATH
SPECIAL TO THE STAR

A coroner's inquest has returned a verdict of accidental death in last week's St. Clair Ave. fatality. Miss Laura Chase, 25, was travelling west on the afternoon of May 18 when her car swerved through the barriers protecting a repair site on the bridge and crashed into the ravine below, catching fire. Miss Chase was killed instantly. (TBA: 6)

Readers encountering this passage in its original context understand that both Extracts 1 and 2 are written by Atwood, so from a Text World Theory perspective the split discourse-world of the reading experience remains unchanged. However, the presence of the heading 'The Toronto Star' signifies that within the world of the novel, the chapters are written by different authors and therefore function as discrete pieces of discourse. As such, the opening lines of Extract 2 creates a discrete initial text-world, distinct from the initial empty text-world created by Iris's narration, and with a different ontological status.

The initial text-world prompted by Extract 2 is populated by the function-advancing proposition 'A coroner's inquest has returned a verdict...'. This opening line offers few world-building elements, but readers may draw on background knowledge to create a mental representation of events unfolding in a coroner's court. The extract then prompts a world-switch with the sentence that begins 'Miss Laura Chase, 25, was travelling west...', triggered by the change from present perfect to past continuous tense. This new text-world is populated with an enactor of Laura, a car, a ravine, and a bridge undergoing repairs. Readers are likely to infer that these world-building elements refer to elements previously invoked by Iris's narration. One effect of this may be that readers retrieve previously mentioned world-building elements from memory when imagining this scene, such as the 'treetops feathery with new leaves', or the dress with the 'shirtwaist' that Iris imagines Laura to be wearing. As the report continues however, some of the details contradict previously given information. Readers are told that 'It was the police view that a tyre caught in an exposed streetcar

track was a contributing factor' in Laura's death. This uncontradicted statement about the beliefs of 'the police' contrasts with Iris's account, in which an individual police officer offers multiple explanations for Laura's death. Readers must therefore choose between one of several possible strategies for reconciling this discrepancy. They may replace previously incremented information by undertaking world-repair. Adopting this strategy would require the reader to assume an equivalence between the initial text-worlds prompted by Extract 1 and Extract 2. If readers do not attempt to reconcile the two accounts, they may ignore contradictory elements in Extract 2, choosing not to increment conflicting information. Alternatively they may maintain two discrete mental representations of the states of affairs described by each source.

As well as reinforcing some elements of Iris's narration and contradicting others, the newspaper report provides information about the accident and the subsequent inquest that is not included in Extract 1. For example, readers learn Iris 'gave evidence that Miss Chase suffered from severe headaches affecting her vision', and that she 'denied any possibility of intoxication as Miss Chase did not drink'. The newspaper account also provides a number of biographical details about Laura, Iris and Richard that are missing from Iris's account. Again, readers can adopt different strategies for processing these details, attempting to increment them into a single consolidated representation combining details from both extracts, or maintaining discrete representations of the different discourses.

Analysis of the Group 2 responses provided an opportunity to explore the strategies that different respondents adopted.

7.5.2 - Group 2 Results: Strategies for Comprehending Atwood's Multiple Narrators

Among the 91 summaries from Group 2 respondents who saw both Extract 1 and Extract 2, two distinct strategies were observed. 48 respondents (53%) produced summaries in which content from the two extracts was clearly delineated. In the majority of these, the existence of the two extracts was marked with explicit descriptions of the two discourse types:

- The first section is in first person, recounting [...] The second section is from a newspaper report [...] (Respondent 2-12)
- The narrative then changes to a newspaper report of the inquest (Respondent 2-38)

However, a minority of respondents who produced clearly delineated summaries did so without acknowledging the nature of the two extracts. This pattern was exemplified by Respondent 2-68, who used a paragraph break to separate information conveyed in the separate extracts, but otherwise did not acknowledge their distinct status:

Laura drove her car off a bridge. She was wearing white gloves at the time. Two eye witnesses claimed that she had intentionally driven off the bridge into the ravine, but the 1st person was adamant this was unlikely. The first person communicates with the officer who called to inform them that Laura had been in their car and that she had died.

An inquest was held and ruled the incident was an accident. Laura didn't drink so unlikely to be intoxicated at the time, but there was something wrong with her vision (Respondent 2-68, summary replicated in its entirety)

This response is significant for the fact that, even though information from the two extracts is clearly delineated, the two texts-worlds created by the opening lines of the two paragraphs are presented as if they have the same ontological status.

A contrasting strategy was adopted by 39 respondents (43%), who produced descriptions of the events surrounding Laura's death that combined world-building elements and function-advancing propositions from both Extracts 1 and 2 into a single description. (The remaining 4 summaries were either ambiguous, or too short for this distinction to be meaningfully applied). A typical exemplar of the second strategy was provided by Respondent 2-9:

The scene is being set; a women has driven off a cliff through a barrier. The sister of the women is being interviewed about her temperament, she didn't drink, but was a Careless driver Even though she [wore] prim and proper clothes. We learn the sister is married to someone that might be important. (Respondent 2-9, summary replicated in its entirety)

Comparing this summary to the prompt text, we note that Iris's interview and her claim that Laura didn't drink is recounted in Extract 2, while details of the careless driving and the prim and proper clothes are given in Extract 1. Thus respondent 2-9 has presented a summary which prompts a single representation of the events surrounding Laura's death by combining world-building elements and function-advancing propositions from the two distinct discourses. As with response 2-68, all the information in this summary is presented with the same ontological status.

This data shows that two different strategies exist for summarising information presented in conflicting discourses, and that both were adopted by at least some respondents on this occasion. However, no correlation was observed between the strategies employed by individual respondents and their scores on the 'story-driven reading' or 'empathy' scales. Further work would be needed to determine whether individual reader dispositions led to a tendency to adopt one strategy or the other.

7.5.3 - Group 2 World Tallies

As the discussion in the previous section has demonstrated, Group 2 respondents needed to employ strategies to reconcile two contrasting discourses. In this respect, the task they were asked to perform differed from that performed by Group 1 respondents. However, this experiment was also designed to test how Group 2 respondents' summaries of Extract 1 differed from those in Group 1.

Responses from the 48 respondents who provided clearly delineated summaries were isolated from the Group 2 data set, and these summaries were analysed using the same 'world-tallying'

methodology as those from Group 1 respondents. The results are presented in Table 7.4, alongside those of Group 1 respondents, with both presented as a percentage of responses analysed.

From these results, the following trends appear significant:

- Firstly, there is a notable similarity between responses from the two groups. For both the 'worlds recreated' and 'contents included' tallies, only five instances were noted where the differences between the two groups was greater than 10%, and no instances were noted of a difference greater than 20%.
- As with Group 1 respondents, responses from Group 2 respondents revealed that a core of worlds were replicated with reasonable frequency, and a majority of worlds and world contents replicated only rarely. In other words, it appears from these results that consolidation processes that happened as a result of reading Extract 2 had a smaller effect than consolidation processes that happened independently, at least for the subset of respondents who adopted the strategy of summarising the two extracts separately. One possible explanation for this is that a significant amount of consolidation happens as mental representations are transposed from working- to long-term memory during discourse processing. While these results certainly do not offer proof of this, this does provide a useful hypothesis to explore in future work.
- Some worlds were recreated or world contents included by a smaller percentage of Group 2 respondents than Group 1 respondents. For example, Group 2 respondents were less likely to mention Iris's intention to identify Laura's body (worlds 20 and 21), mention Laura's charred remains (world 2) or repeat details of Laura's physical appearance (world 35). Such omissions may have occurred as a result of respondents forgetting information as additional discourse was processed, or may have occurred as a result of respondents treating such information as less significant in the light of new information. However, the observed differences in these cases were small.

Table 7.4 - Frequency with which worlds and their contents were recreated in Group 1 and Group 2 responses. (The ten most frequently included worlds in each data set, and the largest discrepancies, are shaded for clarity.)

	World recreated			Contents included		
	Group 1	Group 2	Group 2 Difference	Group 1	Group 2	Group 2 Difference
1 - TW	92%	92%	0	92%	92%	0
2 - Neg	6%	2%	-4	12%	2%	-10
3 - WS	69%	77%	+8	69%	77%	+8
4 - WS	5%	2%	-3	5%	2%	-9
5 - Epis	2%	0	-2	11%	13%	+2
6 - Speech	12%	15%	+3	0	0	0
7 - Epis	6%	17%	+11	6%	19%	+13
8 - Epis	6%	10%	+4	8%	13%	+5
9 - Deo	0	2%	+2	0	0	0
10 - Speech	11%	31%	+20	51%	50%	-1
11 - Speech	1%	0	-1	0%	0	0
12 - Epis	8%	19%	+11	4%	4%	0
13 - Speech	29%	23%	-6	46%	58%	+12
14 - Blend	2%	0	-2	2%	0	-2
15 - Epis	16%	23%	+7	18%	29%	+11
16 - Epis N	1%	0	-1	2%	2%	0
17 - WS	12%	6%	-6	13%	6%	-7
18 - Neg	2%	0	-2	4%	0	-4
19 - Wpis	1%	2%	+1	0%	0	0
20 - Boul	1%	0	-1	26%	17%	-9
21 - Boul	18%	6%	-14	19%	6%	-13
22 - Epis	1%	2%	+1	12%	15%	+3
23 - Blend	0	0	0	0	0	0
24 - Speech	20%	1%	-19	0	0	
25 - Deo	2%	0	-2	2%	0	-2
26 - Blend	3%	2%	-1	2%	2%	0
27 - Epis	6%	4%	-2	6%	4%	-2
28 - Epis	20%	21%	+1	31%	21%	-10
29 - Blend	3%	0	-3	2%	0	-2
30 - Speech	9%	0	-9	0	0	0
31 - Boul	0	0	0	17%	8%	-9
32 - Speech	21%	21%	0	23%	19%	-4
33 - Neg	3%	4%	+1	4%	10%	+6
34 - Epis	0	0	0	0	0	0
35 - Epis	14%	15%	-1	26%	17%	-9
36 - Epis	2%	2%	0	3%	2%	-1
37 - Epis	2%	2%	0	3%	4%	+1
38 - Neg	2%	0	-2	2%	0	-2
39 - Blend	4%	2%	-2	4%	2%	-2
40 - Blend	0	0	-	0	0	0
41 - Blend	11%	4%	-7	9%	13%	+4
42 - Blend	14%	17%	+3	16%	21%	+5

- Conversely, some worlds were recreated or world contents included by a larger percentage of Group 2 respondents than Group 1 respondents. Group 2 respondents were three times as likely to mention the streetcar tracks that were suggested as a possible cause of Laura's accident; a fact presumably explained by the fact that the newspaper report repeats this suggestion.

Perhaps more significantly however, Group 2 respondents were somewhat more likely to mention the 'suicide' explanation for Laura's death (by recreating the contents of worlds 13 and 15), and three times more likely to do this by attributing this belief to the policeman (by recreating text-world 10, triggered by his speech act). In other words, when discussing the cause of Laura's death, Group 2 respondents were less likely to simplify the conceptual structure of their summaries by presenting the reports of the policeman as if they were fact. Again, it is not possible to draw definitive conclusions from this, particularly as the absolute number of respondents exhibiting these behaviours is small. However, one possible explanation for this is that the ontological simplification processes I discussed earlier in this chapter represent default comprehension strategies that are likely to be adopted in the absence of evidence to the contrary. For Group 2 participants, the subsequent appearance of contradictory information may have overridden this default strategy. However, if this was the case, it would require at least some consolidation to take place later in the storage and recall process, rather than at the point where information was first transferred from working- to long-term memory. Again, this data does not allow us to draw conclusions about this, but again provides a hypothesis that could be tested in future studies.

In addition, the following observation was made. In the Group 1 data set, it was observed that no respondents recreated the text-worlds created by the linguistic hedges in the phrases 'he also felt bound to inform me...' and 'I could picture...'. In the Group 2 data set, one respondent recreated the first hedge, but none recreated the second:

Police had to say 2 witnesses reckoned it was deliberate... (Respondent 2-21)

Thus, while removing such hedges during consolidation does appear to be one that is employed by a large majority of respondents, it is clearly not a universal process.

7.5.4 - Group 2 Text-World Consolidation Strategies

Responses from the Group 2 data set provided further evidence of respondents employing the consolidation strategies observed in the Group 1 data set and reported in Section 7.4.2. For brevity, I do not discuss individual cases here, since these do not advance the arguments I have already made. However, for completeness I include examples from Group 2 respondents alongside those from Group 1 in Appendix D.

7.5.5 - Respondents' Recall of Biographical Information

One other feature of the Group 2 data set may be significant for exploring how readers create consolidated mental representations of narratives. Among the responses of respondents who presented clearly delineated summaries of Extracts 1 and 2, one exception to this pattern was noted. When making reference to particular characters, respondents often drew on biographical details that had been revealed elsewhere in the text. This behaviour can be demonstrated by comparing the following extracts:

A woman was informed by a policeman that her sister had died in a car crash. [...] The text then cuts to a Toronto newspaper's account of the incident, which reveals that the official story is that of an accident, and identifies the narrator by her husband's name.
(Respondent 2-22)

Here, Respondent 2-22 has been explicit about documenting which part of the prompt text revealed the narrator's name. We can contrast this with the response of Respondent 2-40, who opened their delineated summary as follows:

Mrs Griffen's sister drove through a danger sign before a bridge and her car went off the edge of the cliff. (Respondent 2-40)

Here, Respondent 2-40 has identified Iris by her surname, even though this information is not given to the reader until Extract 2. This pattern was spotted frequently across the corpus. The following quotes reveal examples of respondents including names, ages and professions given in Extract 2 in their Extract 1 summaries. (Underlined information was only given in Extract 2).

- The extract relates to a young women of 25 called Laura who drove her car off a bridge and fell to her death (Respondent 2-11)
- The narrator is Mrs Richard Griffen, and she is describing how a policeman informed her of her sister's death' (Respondent 2-44)
- The text was the narrative of Laura Chase's death and the reaction of her sister (Respondent 2-61)

This finding may support Emmott's suggestion that narrative comprehension may involve a process of creating and maintaining a number of different kinds of 'entity representations' to store information about entities such as characters or locations in narratives (1997: 35-9), and that readers' knowledge about characters may be distinct from representations of events in which those characters participate. I discuss this suggestion in more detail in the following chapter.

7.6 - Repetition in the source text

Before concluding the discussion of this data set, one further issue is worth noting. Analysis of the prompt text reveals that many of the world-building elements and function-advancing propositions are mentioned only once. Indeed, a major advantage of this methodology is that allows the analyst to make explicit connections between clauses in participant summaries and the clauses in the original text which prompted them. However, there were several instances of repetition in the prompt text. It is widely acknowledged that repetition can act as a foregrounding device (Short 1996: 13), leading readers to pay more attention to particular features in the moment of reading. It is also known that repetition aids memory, (although repetition alone may not ensure storage in long-term memory) (Baddeley 1999). For these reasons, a brief discussion of the implications of repetition in the source text is useful.

It is common for fictional texts to make repeated reference to the same entities, and in particular to characters who might be referenced using a repeated proper name, a repeated description, an anaphoric pronoun or a combination of all three. For example, in Extract 1 one of the prompt text the narrator uses the word 'policeman' twice, and makes four additional anaphoric references to the referring character using the pronoun 'he'. The same policeman therefore appears as a world-building element in a number of discrete text-worlds. By contrast, the character 'Richard' is mentioned only once, and appears as a world-building element in only a single text-world. This did not present methodological problems, since the primary purpose of this study was to determine the extent to which the conceptual structure of the original text was replicated. However, the fact that significantly more respondents made *any* reference to the policeman than they did to Richard is likely to be a consequence of these repeated mentions, even when respondents failed to recreate the majority of individual text-worlds and corresponding world-building elements in which the policeman appeared. This finding could be accounted for by 'landscape' models of working memory (described in Section 2.3.1), in which attention is spread across a number of different elements and varies dynamically during discourse. In this model, the character of Richard is likely to fade from attention

as discourse progresses, while the character of the policeman remains a focus of attention because of the repeated references. I discuss the idea of scaled readerly attention again in Section 8.3.

A similar question is raised by the repeated references to 'white gloves' in Extract 1. These are mentioned twice: firstly when the policeman reports that the eyewitnesses notice Laura wearing them, and secondly when the narrator creates a blended world by drawing a comparison between Laura wearing white gloves and washing her hands. Again, the primary purpose of this investigation was to determine whether or not these discrete modal and blended worlds were prompted in respondent summaries. However, it is acknowledged that even when participants only recreated one of the relevant worlds, the two separate references to the same world-building element are likely to have been significant. In addition to the simple fact of repetition, Emmot and Alexander (2014: 330) have suggested that readers are more likely to pay attention to world-building elements which characters themselves pay attention to. Thus, by revealing her own interest in the white gloves through her use of metaphor, Iris may be increasing the likelihood of readers attaching significance to the eyewitnesses' report of the gloves, and increasing the chance that readers increment the gloves into their evolving representation of the most ontologically prior world projected by the text.

A further issue is raised by the question of world-building elements that are mentioned in both Extract 1 and Extract 2 of the prompt text. In Section 7.5.3, I discussed how the repetition of 'streetcar tracks' not 'brakes' in Extract 2 may have affected respondents' summaries of Extract 1. Again, landscape models of readerly attention would account for this effect.

Finally, it is worth considering repeated mentions of 'bridge' in the prompt text. The word bridge is used four times in the body of Extract 1, and once in the body of Extract 2. Significantly however, it is also used as a chapter title at the start of Extract 1. Rabinowitz has suggested that titles can play a significant role in framing reader interpretations of a text, for example by 'telling us where to concentrate', and 'provid[ing] a core around which to organise an interpretation' (2002:302). This suggestion is echoed by Bartl and Lahey, who present data to suggest that readers expect titles 'to serve as interpretive metonyms for the entire discourse' (2023: 223), and suggest that readers can

begin a process of world-building in response to a title before beginning to read the text 'proper' (225). The use of 'The Bridge' as a chapter title may therefore have acted alongside the frequent repetitions within the body of text to result in 'bridge' being one of the most frequently recreated world-building elements in participant summaries. (I discuss readers inclusion of the bridge in their summaries more fully in Section 8.3 below).

It is therefore acknowledged that repetition in the prompt text may have played a significant role in determining which elements readers included in their summaries. In a single study like this it is not possible to separate the effects of repetition from the many other variables which will have shaped reader responses. However, further studies - perhaps drawing on two manipulated copies of a source text - could explore this effect more systematically.

7.7 - Discussion

In Chapter 3 I offered three hypotheses about what might happen to readers' text-world mental representations as they are stored in and retrieved from long-term memory, and in Chapter 6 I revisited these in the light of my study of Goodreads reviews of *Surfacing*. I now return to these and discuss them in the light of the findings presented in this chapter.

My first hypothesis was that readers do not recall texts 'world-by-world', and that the conceptual structure prompted by a source text in the moment of reading is not necessarily retained over time. I noted that this hypothesis was hard to test using Goodreads data, as respondents were writing precis of a novel rather than setting out to provide comprehensive summaries. Data from my *Blind Assassin* study, by contrast, provides more clues about relevant cognitive processes that may occur during comprehension and subsequent recall. It remains the case that writing a summary of a text after the moment of comprehension is not the same as writing down everything one can remember about it. It would therefore be wrong to conclude that detail missing from a respondent's summary in this study is conclusive evidence that the respondent could not have reproduced that same detail under different experimental conditions. However, most respondents produced

summaries that omitted most worlds prompted by the source text. Moreover, a significant number of worlds, such as many of those associated with linguistic hedges, were omitted by most or all respondents. This suggests that there are particular consolidation processes which are employed, if not universally, then at least with a high frequency by readers. The fact that similar patterns of world-omission were observed in both Group 1 and Group 2 respondents may be a clue that a significant amount of consolidation happens immediately after reading. While this data does not prove this fact, it does offer a credible hypothesis which could be tested with different methodologies.

My second hypothesis was that readers would simplify the conceptual structures of narratives by taking world-building elements or function-advancing propositions presented in modal-worlds and presenting them as facts at prior ontological levels. Across my *Blind Assassin* corpus I found significant evidence of summaries that reflected this behaviour; a finding that echoes my *Surfacing* study. I also found evidence of related consolidation strategies. Some respondents simplified chains of multiply-embedded worlds by presenting modalised information not as fact at the initial text-world level but as the belief of a character who reported the relevant speech or belief act in the original text. In addition, some respondents presented summaries in which information presented in modal-worlds was summarised in language that prompted worlds of different modal categories; a finding which I suggested might reveal the importance of respondents' schematic knowledge in constructing summaries. Some respondents also produced summaries in which the text-world conceptual structure was altered to convey events in the order the narrator experienced them rather than the order in which they were narrated; a finding which I suggested was interesting in terms of the portrayal of point of view in narrative.

My third hypothesis was that readers would add elements to a narrative's conceptual structure as they made hypotheses about unnarrated events, and about the mental states of characters. This study showed respondents exhibiting this behaviour. It also revealed further examples of respondents attributing mental states of individual characters to those of wider groups of individuals, or to beliefs that were generally held; a pattern also observed in the *Surfacing* study.

In the following chapter, I attempt to draw some wider conclusions from these findings, and suggest how these might have implications for an expanded Text World Theory.

8. Towards an Extended Text World Theory

In Chapter 3 of this thesis, I noted that the majority of focus in Text World Theory to date has been on exploring the mental representations that discourse participants create moment-by-moment during discourse comprehension. I also noted differences between Text World Theory and the storyworlds framework, suggesting that text-world mental representations are primarily constructs that are built and updated in working memory, while storyworld mental representations are primarily constructs in long-term memory. In Chapters 6 and 7, I presented the results of two reader-response studies exploring how readers' mental representations of narratives change after the moment of reading. These studies revealed that readers' summaries of narratives often have very different conceptual structures to the texts that prompt them. While these studies cannot be taken as proof that readers would not be able to produce summaries with conceptual structures closer to the prompt texts under the right circumstances, I have argued that the similarities between many of the responses I have discussed suggest that common consolidation processes occur when readers remember and subsequently recall texts. In this chapter, I explore how my findings might have implications for an extended Text World Theory which aims to account for how readers' mental representations of discourse change over time.

In Section 8.1, I consider two processes by which the conceptual structure of readers' mental representation of narratives may change after the moment of reading. Firstly, in section 8.1.1 I reconsider how readers map elements of text-world structure between text-worlds with different ontological statuses. I then suggest that this is a process that happens commonly after the moment of initial comprehension, drawing analogies with the processes which Fauconnier terms 'optimisation' and 'float' in his mental spaces framework (1985, 1997 and Section 2.2.4 of this thesis). Then in Section 8.1.2, I explore how readers create mental representations of beliefs of characters which are not stated explicitly in the text, relating this to the notion of 'mind-modelling' (Stockwell 2022). In Section 8.2, I explore the idea that we can incorporate aspects of the situation model framework to expand Text World Theory, drawing on recent work by Gibbons. I argue that Gibbons' account of narrative

comprehension, and the parallels she draws with the situation model framework (Graesser et al 1997; Kintsch 1988, 1995; van Dijk and Kintsch 1983; Zwaan et al 1995; Zwaan and Radvansky 1988 and Section 2.2.6 of this thesis), provide further evidence of ways in which mental representations of narratives in long-term memory may differ from those created in working memory. In Section 8.3, I offer a discussion of the analog or analytic nature of text-worlds, and argue that a theory of mental representations in long-term memory needs to account for interactions of different kinds of mental representation. Finally, in Section 8.4, I revisit the storyworld framework and argue that Text World Theory might draw on this to provide a more complete account of long-term mental representations of narratives.

8.1 - Ontology and Conceptual Structure Consolidation

8.1.1 – Conceptual Structure Simplification

One axiom of Text World Theory is that readers create mental representations by drawing on both textual prompts and background knowledge. In Section 3.3.2, I described how this process is governed by the ‘principle of minimal departure’ (Gavins 2007:12; Ryan 1991: 51), which is normally invoked to account for the process by which listeners and readers draw on existing knowledge of the discourse-world to ‘fill gaps’ in text-world mental representations. However, as Emmott (1997: 3) notes, readers comprehending novel-length narratives must also draw on a growing body of knowledge about the fictional world itself when reading:

[A] writer can expect the reader to know certain facts because they have been stated earlier in the text that is being processed [...] [R]eaders of a narrative must accumulate knowledge that is specific to the fictional world, such as facts about particular characters and the situations they are placed in. (Emmott 1997: 3-4)

In my *Blind Assassin* study, described in Chapter 7, I saw evidence of this when I observed readers describing characters by amalgamating biographical information from across a text, including from passages that functioned as discrete discourses within the world of the text.

If we assume that readers process the language of fictional narratives using the same tools as they use to process other discourses, then it seems reasonable to assume that readers should be able to draw upon such text-specific background knowledge just as they draw on knowledge of the discourse-world during comprehension. Thus, readers constructing a modal-world prompted by a fictional text should be able to draw upon previously acquired knowledge about the world from which the modal-world arises, and from ontologically prior text-worlds. In other words, the principle of minimal departure, which ordinarily describes the application of discourse-world knowledge to a text-world, may be just a specific example of a more general principle by which listeners and readers map existing knowledge from ontologically prior worlds (parent and grandparent worlds) when constructing subsidiary worlds. This more general process would be analogous to the process that Fauconnier describes as ‘optimisation’ in his mental spaces framework:

Structure from the parent space is transferred to the new space by default. [...] The default transfer, called optimization, will apply to the extent that it does not contradict explicit structure in the new space. (Fauconnier 1997: 43)

As well as optimisation, Fauconnier also describes a process he terms ‘float’, in which structure can be mapped back from ontologically subordinate spaces into what he terms parent spaces. In Fauconnier’s formulation of the mental spaces model, this process happens specifically as a result of discourse participants making ‘presuppositions’ (Werth 1993). Fauconnier illustrates this with examples including the sentence ‘Maybe Max’s son is giving him trouble’ (1985: 85). In the mental spaces framework, the word ‘maybe’ acts as a space-builder, creating a ‘possibility space’ in which the proposition ‘Max’s son is giving him trouble’ is true. This sentence carries a presupposition that Max

has a son, and Fauconnier argues that such presuppositions are mapped back into parent and grandparent spaces 'until, or unless, they are blocked by incompatibility in a higher space' (1985: 100). In other words, discourse participants invited to construct a possibility space containing a representation in which 'Max's son is giving him trouble' understand this state of affairs to be hypothetical, but may update their real-world knowledge to reflect the fact that Max has a son, at least in circumstances where they assume the speaker or writer is in a position to know whether or not this is true.

As I have demonstrated, my *Blind Assassin* data set contained frequent examples of participants reporting information presented to them in modal-worlds as if it were true in an ontologically prior text-world. In some cases, participants appeared to be demonstrating a process analogous to Fauconnier's mental space 'float'. For example, the prompt 'the tyres may have caught on a streetcar track' contains the presupposition that there were streetcar tracks at the site of Laura's accident. Participant 1-13 reported this in a manner that implied the streetcar tracks were present in the world from which Iris was narrating:

The novel appears to be set in America and there is a suggestion of 1950's (white gloves streetcar tracks) (Participant 1-13)

However, as the examples discussed in Chapter 7 reveal, a more common pattern was for participants to map entire propositions rather than just presuppositions into ontologically prior text-worlds. For example, the prompt text, "'I'm afraid there will be an inquest, Mrs Griffen," he said' prompted responses which presented the fact of the inquest as a truth in the world from which Iris was narrating, rather than as a boulogmaic text-world associated with the policeman and his act of direct speech:

An inquest will be held (Participant 1-4)

There will be an inquest. (Participant 1-22)

Such examples suggest that text-world structure can 'float' from modal-worlds to ontologically prior worlds. However, the notion that such elements are *automatically* transposed in this way is one that Werth considers and dismisses in his original formulation of Text World Theory. His discussion centres around an example taken from the first line of a Hemingway short story:

Dick Boulton came from the Indian camp to cut logs for Nick's father. (Quoted in Werth 1999: 52)

Werth notes that the 'logs' in this sentence are associated with Dick's intention-world rather than the initial text-world. (Werth uses both 'purpose world' and 'intention-world' at different points in his argument, and appears to use the terms interchangeably. I have restricted myself to intention-world here for consistency. For a discussion of the differences between Werth's sub-worlds and Gavins' modal-worlds and world-switches, see Section 3.3.3 of this thesis). He then claims that the mental worlds of characters 'may turn out to be consistent with the main text-world, contradict it, or even be logically incompatible with it' (1999: 56), and subsequently notes that 'these logs remain in Dick Boulton's intention-world until otherwise determined' (286).

If we consider the mental representations generated in the moment of reading, then Werth's account of readers' discrete text-world and intention-world representations is surely correct. If the following sentence of Hemingway's story were to reveal that the logs that Dick expected to find were absent, the distinction between the text-world and intention-world would be foregrounded in the reader's attention. However, in the absence of such a qualification, the inference that there are really logs to be cut is not an unreasonable one. Indeed, when Hemingway's text subsequently confirms the existence of logs in the text-world several sentences later, it does so with sentence 'The others went on ahead of him down to the lake shore where the logs were buried', and here the logs are introduced with

a definite rather than an indefinite article, implying that their existence is given rather than new information. One possible explanation for this is that a tendency to map text-world structure from modal-worlds into ontologically prior worlds represents a default consolidation strategy that occurs shortly after the moment of comprehension, unless it is overridden by other discourse elements. Such a strategy might explain why, in my *Blind Assassin* data set, some modal-worlds (such as those associated with linguistics hedges) were recreated rarely or not at all by participants, while others were recreated with much higher frequency. In this model, the principle of minimal departure might be one which governs the ways in which discourse participants map data 'upwards' or 'downwards' between any pair of parent and child worlds, rather than just one which only governs the application of discourse-world knowledge to text-world construction.

While this idea was not explored in Werth's original formulation of Text World Theory, it is one which has been alluded to by more recent theorists. In his study of Keats' poetry, Giovanelli explores how the poem 'The Eve of St Agnes' requires its reader to 'monitor and keep track of a number of different enactors' of the characters Madeleine and Porphyro across the initial text-world and worlds prompted by modalised expressions (2013: 101; N.B. Giovanelli here describes the initial text-world as a 'matrix' text-world). In his analysis, Giovanelli suggests that readers map knowledge of Madeline from the initial text-world into her 'boulomaic dream world', and increment this along with general knowledge to create 'a rich sense' of the enactor in the modal-world (2013: 103). He also suggests that readers update their knowledge of Madeline in the initial text-world on the basis of what they learn about her in the boulomaic modal-world (2013: 102). In his discussion, Giovanelli suggests that Werth's model 'pays little real attention to how the phenomenon of multiple enactors as a result of complex world-switching is monitored by a reader', but suggests that such processes result in a 'significant literary effect' in Keats' poem (2013: 102). He goes on to suggest that a readers' choice about which of several competing modal-worlds to give 'prominence' to can account for contrasting readings of the poem (2013: 106).

More recently, Lahey has challenged what she describes as a ‘traditionally assumed [...] unidirectional model of knowledge transmission from discourse-world to text-world’ (2019: 53). Discussing Sheldon Currie’s novella *The Glace Bay Miner’s Museum*, she discusses how readers may update their knowledge of the real museum, located in the discourse-world, based on what they learn about the museum in the text-worlds of the novella. She suggests that:

This learning may involve modification of existing knowledge, prompted in part by readers’ discernment of transworld links between the world of the fiction and their real world (Ryan 1991: 52), or it may involve the accrual of completely new knowledge.

(Lahey 2019: 68)

Rejecting the notion that readers update their real-world knowledge as a result of their (split) discourse-world encounter with the author, she argues instead that the process can only occur as a result of what she terms a ‘cognitive feedback loop’, in which ‘information feeds from the reader’s mind, through the discourse-world into the text-world, and back again through the discourse-world and into the mind’ (2019: 68). She then goes on to argue that an account of this feedback loop mechanism should be integrated into the architecture of Text World Theory (2019: 69). Though Lahey’s attention in this discussion is on information crossing the boundary from text-world to discourse-world and back again, it does not seem unreasonable to suggest that similar processes may occur across other ontological boundaries - for example, when readers infer transworld links between enactors of characters in an initial text-world and in ontologically subordinate modal-worlds. Further discussions of the implications of readers updating real-world knowledge on the basis of fictional information can be found in Canning (2017) and Lahey (2016) (from a Text World Theory perspective), and Ryan (2002) (from a storyworlds perspective).

In the light of this discussion, and the results I have presented in previous chapters, I suggest that the mapping of information between text-worlds and modal-worlds at different ontological levels

may be a common consolidation process that occurs after the moment of initial comprehension. In other words, Text World Theory accounts of comprehension may be expanded by incorporating equivalents of Fauconnier's notions of optimisation and float to account for ways in which world-building elements and function-advancing propositions are mapped from one world to another. In particular, the mapping of information from modal-worlds into a representation of the world from which a narrator narrates may be a significant process by which the text-world conceptual structure of a discourse is simplified after initial comprehension. One measurable effect of this phenomenon is the ability of readers to present summaries of narratives in which information originally conceptualised in modal-worlds is presented back as structure at an initial text-world level. This phenomenon was one which occurred frequently in my *Blind Assassin* data set.

What is harder to determine from the data I have presented in this thesis is the question of whether the original conceptual structure of a narrative is forgotten by readers, or whether the consolidated version is retained alongside a memory of the original representation. I return to this question later in this chapter.

8.1.2 – Conceptual Structure Consolidation and Mind-modelling

In the previous section I discussed processes by which readers may simplify the conceptual structure of a narrative text to produce a summary that prompts fewer text-worlds than the original. When presenting the analyses of my survey responses in Chapter 7, I noted that without exception, every summary offered by readers prompted the creation of fewer text-worlds than Atwood's original. However, I also noted that in some instances, readers offered summaries that prompted modal-worlds associated with character beliefs that were not stated explicitly in the original text.

This finding tallies with theories of 'mind-modelling' which have been explored by cognitive stylisticians and others interested in mental representations of narrative. Zunshine, drawing on the work of psychologist Baron-Cohen (1997), suggests that readers commonly engage in a process of 'mind-

reading' (also known as 'Theory of Mind') when we imagine fictional characters, and that this ability mirrors the way we engage with people in the real world:

We engage in mind-reading when we ascribe to a person a certain mental state on the basis of an inferable action' [or] 'when we intuit a complex state of mind based on a limited verbal description (Zunshine 2006: 6)

For Zunshine, the opportunities that prose affords to engage in mind-reading constitute a major pleasure of reading - at least for some readers (2003, 2006, 2007, 2015). More recently, Stockwell has built on this idea to make the case that 'mind-modelling' is a key part of fictional comprehension:

[M]ind-modelling involves creating and maintaining mental models of other minds, including their relationships with each other at different ontological levels. (Stockwell 2022: 135)

[T]he notion of mind-modelling draws on but is not identical to the psychological and neuroscientific notion of *Theory of Mind* [...] The active and reiterated creative aspect of this process is why we prefer the term mind-modelling to the more passive senses of 'mind-reading' or 'mind-attribution' (Stockwell and Mahlberg 2015: 133)

Despite Stockwell's preference for the more active term, Zunshine herself agrees that the attribution of mental states to characters is a constructive process in which readers imagine more than a text explicitly states:

[W]orks of fiction manage to "cheat" these mechanisms into "believing" that they are in the presence of material that they were "designed" to process, that is, that they are in

the presence of agents endowed with a potential for a rich array of intentional stances.’
[...] The very process of making sense of what we read appears to be grounded in our ability to invest the flimsy verbal constructions that we generously call “characters” with a potential for a variety of thoughts, feelings, and desires and then to look for the “cues” that would allow us to guess at their feelings and thus predict their actions.’ (Zunshine 2006: 10, my emphasis)

This same idea is explored by Palmer in his work on readers’ construction of fictional minds:

It is almost as though the text is simply the scaffolding on which you build the vivid psychological processes that stay with you for long afterward (Palmer 2004: 3)

In other words, the suggestion that discourse consolidation includes the creation of novel modal-worlds to reflect imputed beliefs or fears of characters echoes ideas advanced by other cognitive stylisticians and cognitive narratologists. In this context, one other idea of Palmer’s may be worthy of consideration. Palmer has suggested that in addition to imputing mental states to individual characters, readers may attribute thoughts and beliefs to social groups; a phenomenon he names ‘Middlemarch mind’:

[This] is a crucially important component of fictional narrative because much of the mental functioning that occurs in novels is done by large organisations, small groups, work colleagues, friends, families, couples and other intermental units. [...] One of the most important characters in George Eliot’s *Middlemarch* is the town of Middlemarch itself. (Palmer 2005: 427; see also Palmer 2010)

Further consideration of this idea in the light of the consolidation process I termed ‘modal generalising’ (Section 7.4.2.4) might be useful.

When it comes to mind-modelling however, one word of caution is merited. In the survey data which I discussed in Chapter 7, I presented clear evidence of participants reporting inferences they had made concerning Iris's beliefs about Laura's death. Linguistic prompts such as 'she believes it was an accident' (Respondent 1-46) can be read as equivalent to a Narrator's Representation of a Thought Act (Short 1996: 311), with the verb 'believes' clearly prompting the creation of a discrete modal world. However, Palmer has argued (2002: 31 and 2004: 57) that traditional linguistic accounts of thought presentation tend to be biased towards the notion that thought is a verbal process, and has suggested that in reality readers make inferences about characters' states of minds - including their emotional states - by observing their actions as well as by attending to explicit linguistic cues. In practice, readers' mind-modelling processes may vary on a cline between attributing specific linguistically encoded beliefs and more general feelings of empathy or shared emotion. The latter experiences, I have argued, also come under the umbrella of 'mental representation', but are harder to account for in traditional linguistic or text-world theory terms. I consider the multi-modal nature of text-world representations in more detail in Section 8.3, and in my reading of Atwood's 'Alphinland' short story sequence in Chapter 9. Before I do so, however, I wish to draw upon another recent study which provides further theoretical perspective which may illuminate the question of what happens as text-worlds are stored in and retrieved from the long-term memory.

8.2 - Text-Worlds and Situation Models

In Section 2.2.6 of this thesis, I introduced the situation model account of discourse comprehension (Graesser et al 1997; Kintsch 1988, 1995; van Dijk and Kintsch 1983; Zwaan et al 1995; Zwaan and Radvansky 1988), and noted how this predicts that readers create separate mental representations of a text and of the situations that the text describes. The situation model framework was cited by Werth (1999: 74) as an antecedent of Text World Theory, but its relevance has rarely been discussed in more recent accounts (Gibbons 2023). However, Gibbons has recently made a powerful case for revisiting

the framework and asking whether elements can be incorporated into an extended Text World Theory.

Gibbons begins by drawing analogies between the two models, with the aim of demonstrating that much empirical evidence used to support the situation models framework can also be used to validate Text World Theory. Of particular relevance to this thesis is her discussion of how elements of an evolving discourse are reconciled with previously encountered information. Zwaan and Radvansky describe how the situation model framework describes interactions between three distinct kinds of mental representation:

In analysing the process of situation model construction and the retrieval of situational information, we distinguish between (a) the *current* model, the model currently under construction at Time t_n ; (b) the *integrated* model of the situations at Times t_1 through t_{n-1} ; and (c) the *complete* model of the situations at Times t_1 through t_x . The current model is constructed at Time t_n while a person reads a particular clause or sentence, called c_n . The integrated model is the global model that was constructed by integrating, one at a time, the models that were constructed at times t_1 to t_{n-1} while the person reads clauses c_1 to c_{n-1} . Finally, the complete model is the model that is stored in long-term memory after all the textual input has been processed. (Zwaan and Radvansky 1998: 165-6)

Gibbons suggests that we can draw direct parallels between these constructs and elements of Text World Theory. Specifically, Zwaan and Radvansky's 'current model' maps onto the text-world currently being constructed and occupying the readers' attention. Their 'integrated model' corresponds to 'the network of text-worlds that a reader constructs during a literary experience' (Gibbons 2023: 10); the construct that I have been referring to as the 'conceptual structure' of a text. These are both distinguished from the representation which is ultimately stored in the long-term memory, which Zwaan and Radvansky refer to as the 'complete model', and which Gibbons refers to as 'a reader's

subjective version of the totality of a narrative experience' (2023: 10, my emphasis.) Gibbons' use of the term 'subjective' here is significant, since she appears to be implying that the representation which is ultimately stored in long-term memory varies from reader to reader, rather than being produced as the result of a deterministic process. One potential problem with this parallel could be that we cannot assume a one-to-one correspondence between the 'clause[s] and sentence[s] that Zwaan and Radvansky suggest are responsible for generating the 'current model' under construction, and the units of discourse responsible for creating individual text-worlds, which are often longer than a single clause or sentence. However, if we allow that not every new sentence leads to the construction of a novel current model in the situation model framework, this problem is avoided.

Gibbons then goes on to discuss ways in which readers' situation models change as discourse progresses. She highlights Radvansky and Zack's (2014) notions of 'updating' and 'replacement', and suggests these have parallels in the Text World Theory concepts of 'world-repair' and 'world-replacement' (Gavins 2007: 141-2). She then suggests:

Additionally, Radvansky and Zacks (2014) follow Johnson-Laird's (1983) suggestion that if a reader realises information stored across two (or more) models actually relates to the same situation, "these separate models are blended together to form a new, integrated model. This blending occurs through an alignment of information along the relevant dimensions" (Radvansky and Zacks 2014: 34). In Text World Theory, Gavins (2007: 146–64) draws on Gilles Fauconnier and Mark Turner's (2002) concept of conceptual integration to propose that readers blend text-worlds when processing metaphors. Consequently, although the emphasis is different (correlation of scenarios vs. metaphor), developments in situation-model research and Text World Theory are once again complementary. (Gibbons 2023: 10)

I suggest that this scenario that Radvansky and Zack describe may have applications beyond just the processing of metaphorical language which Gibbons highlights. Advocates of situation models have argued that a major strength of the framework is that it accounts for how readers can assimilate information about a single state of affairs from more than one discourse source (van Dijk and Kintsch 1983: 342, Zwaan and Radvansky 1998: 164). Thus, Radvansky and Zack's 'alignment of information' may account for a wider range of scenarios in which readers consolidate multiple 'current models' to create a single integrated model. One such example may be the way in which readers of *The Blind Assassin* draw upon both Iris's homodiegetic narration and on the fictional *Toronto Star* newspaper report to build a single consolidated understanding of the events surrounding Laura's death. As I demonstrated in Chapter 7, a significant percentage of respondents presented a single account Laura's car crash, combining elements from the two separate discourses and presenting a unified description of a state of affairs unfolding at a single ontological level. Such a process would correspond well with Radvansky and Zack's description of a reader understanding that two separate descriptions relate to the same situation, and blending the two resulting mental representations.

The Blind Assassin, with its complex narrative structure, foregrounds such consolidation processes. However, similar processes may be a frequent feature of narrative comprehension. When readers build representations of fictional worlds, they typically learn about some states of affairs directly from the narrator, and others through the narrated reports of fictional characters. Literature is full of protagonists who - like Bilbo Baggins in *The Hobbit* - learn a substantial amount about their own world through the testimony of an archetypal 'dispatcher' figure (Propp 1928) who appears early in the story to make the hero aware of particular circumstances and send them on their quest. I discussed another example of this phenomenon in Chapter 6, when I noted how readers of *Surfacing* learned of the discovery of the narrator's father's body via the account given by David. Both cases rely on readers accepting that the narrator's testimony and the reported character testimony - though initially prompting different text-world representations at different ontological levels - ultimately refer to the same situations in the fictional world. Though such character reports are not always accepted

uncritically (as I demonstrated in my analysis of *The Blind Assassin* in Chapter 7), the practice of blending narrator and character testimony to provide a single unified model of events in a fictional world is surely an unremarkable feature of narrative processing. As such, it mirrors the way in which humans learn about the real world, by combining both first hand-experience and the testimony of others to build a unified picture.

A third set of circumstances in which such blending processes may be important is when readers rationalise two discrete states of affairs using the same schematic knowledge. Once again, my analysis of responses to *The Blind Assassin* provides an example of such a process, when both critic Dancygier and a subset of my experimental respondents consolidated particular descriptions - of brakes failing and of tyres catching in streetcar tracks - into a single description of an accidental death. As with the previous examples, such a blending process does not involve metaphorical thinking as it is traditionally conceived. However the underlying cognitive mechanisms, in which readers blend two input spaces to create an emergent blended space, may be similar.

A full account of how readers are able to blend two 'current models' or text-worlds to create a consolidated representation will involve considering how readers compare structures which are active in the working memory with structures that have previously been stored in the long-term memory. Gibbons notes that:

In its current form, Text World Theory can plot the text-world architecture of a text but cannot explicate how readers make connections and experience memory traces between text-worlds in their integrated model. The situation model account [...] is therefore invaluable for investigating readers' attempts to obtain narrative meaning (Gibbons 2023: 12)

Gibbons therefore proposes augmenting Text World Theory with a concept she terms 'world-retrieval': a process through which 'readers experience conceptual traces between the text-world

acting as the working model and preceding text-worlds' (2023: 12). She then offers an analysis of the opening paragraphs of Ray Loriga's novel *Tokyo Doesn't Love Us Anymore*, in which she predicts how readers' mental representations of later sections of the text rely on the retrieval of previously conceptualised text-worlds, suggesting that in some cases current worlds are blended with retrieved worlds, and in other cases that retrieved worlds do not become part of the current working model. Examples of the latter process include occasions where anaphoric references prompt readers to map characters described earlier in the discourse into the current world, using prior knowledge to update their current text-worlds without 'overwriting' previously incremented information.

It seems clear that any complete account of discourse comprehension must include processes of world-retrieval such as those Gibbons describes. However, I suggest it may be necessary to draw a distinction between world-retrieval processes which involve readers recalling information in the same conceptual structure in which it was originally conceived, and processes which involve readers recalling information in other forms. The distinction between these two processes can be illustrated by the examples I quoted in Chapter 7, in which some survey respondents presented summaries which distinguished facts learned from Iris's testimony and facts learned from the newspaper report, and some participants combined facts from both sources into a single account. In the former case, respondents were clearly recalling information in its original conceptual structure, distinguishing the two discrete mental representations they had created. In the latter case, responses reveal evidence that participants had blended information from their two discrete representations to create a consolidated one (though of course, we cannot make claims about whether they also retained a memory of the information in its original structure). In her world-by-world analysis of around 400 words from the opening paragraphs of her chosen text, Gibbons includes an example in which she suggests that readers conceptualise the signifier of the anaphoric reference 'your' by drawing on information from four discrete preceding worlds (2023: 14). Though Gibbons' diligent analysis reflects the way in which readers construct a sense of character by combining information from multiple text-worlds, it is surely not possible for readers to retain details of conceptual structure in this way while

processing the hundreds or thousands of text-worlds prompted by a novel-length text. In other words, I suggest it may be useful to distinguish ‘world-retrieval’, a process which involves retrieving a memory of a particular prior text-world, from processes which involve retrieving consolidated information blended from a number of different text-worlds. These latter processes would reflect a reader’s more general understanding about states of affairs in the initial or most ontologically prior text-world, representing the reality of the fictional world.

Such a distinction may reflect the mechanisms by which readers assimilate background knowledge about the real world. Emmott draws a distinction between episodic and ‘semantic’ or background knowledge (For a comparable view see Werth 1999: 110-3):

‘Traditionally, general knowledge [...] was viewed as being so abstract that individuals would no longer be able to remember the original incidents that gave rise to the knowledge. General knowledge of an entity, such as a chair, can be regarded as an abstraction based on many previous experiences of chairs’ (Emmott 1997: 23)

In other words, while knowledge about specific characters may not fall under traditional definitions of semantic knowledge, it may make sense to distinguish two distinct kinds of long-term mental representation of narratives. Alongside memories of specific text-worlds, readers may accumulate a body of background knowledge, potentially stored in distinct kinds of representations. Such knowledge may resemble the types of schemata in which other forms of background knowledge are stored (Section 2.2.2). However Emmott makes a case for particular kinds of ‘entity representations’ that readers use to create long-term mental representations of narratives:

‘[T]ext-specific knowledge [...] is information which applies only within a particular text (or a related group of texts), such as accumulated knowledge about specific characters, about which characters are related to each other, and about which characters live in a

particular place, as well as a record of events that have occurred. [...] It is convenient to regard text-specific information as being held in a number of distinct representations, such as representations for each character and for each location' (Emmott 1997: 35-9)

To support this model, Emmott offers examples of how readers are able to draw on such entity representations during comprehension. For example, she claims they are able to identify the referent of a character who is referred to only by their age or profession (1997: 7). Such a processing strategy that would be hard to account for if readers' long-term memory representations resembled only series of discrete text-world-like mental representations.

What I am suggesting, then, is that readers may create two distinct kinds of long-term mental representation of narratives. Firstly, readers may be able to recall or recreate text-world-like representations which resemble the text-worlds that were originally created during moment-by-moment narrative comprehension. These may retain information about the text's original conceptual structure, and may be retrieved from the long-term memory during the processing of new discourse by the process Gibbons refers to as world-retrieval. Such representations would retain a sense of their original modal framing, and upon recall would remain at a lesser or greater conceptual distance from the states of the affairs conceptualised in the parent text-worlds that gave rise to them.

In addition to such retrievable worlds, readers may be also able to draw on a growing store of consolidated information which they have accepted as an accurate representation of states of affairs in the reality of the fictional world. Such information may have been originally conceptualised in discrete text worlds at a range of different conceptual distances from the initial text-world, and may originally have represented beliefs of, or claims made by, particular characters. However, these will subsequently have been blended into a single representation. Such representations may be similar to the text-world-like mental representations that preceded them, comprising both world-building elements and function-advancing propositions. Alternatively, they may be different in kind, with - for

example - readers retaining information about a particular character independently from any situation in which that character was depicted.

It is my contention that, while the processes by which these latter representations are formed from individual text-world representations may be *predictable*, they are not *deterministic*. In other words, while we may be able to predict consolidation processes that some readers will embark on, not all readers will employ them. For example, some readers encountering a particular character may treat their speech acts or beliefs as reliable, and blend structure from the resulting text-worlds into their evolving representation of states of affairs in the fictional world. Other readers may respond to the same prompt text with more scepticism, refusing the invitation to embark on such a consolidation process, and recalling the character's belief or testimony in its original conceptual structure. Thus, predictable consolidation processes will not necessarily be adopted by all readers, or by every reader on every occasion. Indeed, readers may vary in their propensity to adopt such consolidation strategies. Such differences may go a long way towards explaining why readers of the same text commonly arrive at different interpretations, and why it is frequently claimed that particular texts can support more than one interpretation.

In Section 8.4, I discuss the possible nature of readers' consolidated representations in more detail. Before I do so however, I offer a brief discussion on the analog or analytic nature of text-world mental representations.

8.3 - On the Nature of Text-World Mental Representations

In Chapter 2 of this thesis I noted extensive evidence that readers do not remember written texts word-by-word (Bransford and Franks 1974; Elfenbein 2018: 100; Reyna and Brainerd 1995; Reyna and Kiernan 1994; Van den Broek and Gustafson 1999). I also introduced ongoing debates about the nature of mental representations, and whether they are always propositional in nature (Pylyshyn 1973, 2002) or whether they are sometimes image-based (Kosslyn 1980, 1994; Kosslyn et al 2006). A full discussion of the nature of text-world representations and of information stored in the long-term memory is

beyond the scope of this thesis. However, while many details of surface linguistic structure may be lost during storage and retrieval, my *Blind Assassin* survey data revealed that specific linguistic choices can form an important part of readers' long-term recollections of texts. The majority of survey respondents produced summaries that were clearly attempts to paraphrase the prompt text rather than reproduce it word-for-word. However, the combined Group 1 and Group 2 corpus contained 43 examples of participants including a word or short phrase in quote marks; a stylistic choice that implies they were drawing attention to the precise linguistic formulation of their response. Analysis of these 43 instances reveals what appears to be three common reasons for this behaviour.

Firstly, it appears that participants use quote marks to highlight words from the source text that they had attached particular significance to. For example, two participants used quote marks to highlight 'smithereens', and three to highlight 'penitential' (although one reproduced 'penitentiary'). It was noticeable that these words were often unusual ones. Of the eight least common tokens in the prompt text, as measured by British National Corpus frequency counts ('streetcar', 'chignon', 'smithereens', 'Pontius Pilate', 'penitential', 'treetops', 'ravine' and 'feathery'), five ('chignon', 'smithereens', 'Pontius Pilate', 'penitential', and 'feathery') were highlighted using quote marks by at least one participant in the study. This provides evidence for the foregrounding effect of instances of unusual vocabulary, and suggests that such instances are often stored and later recalled.

In addition to this, seven participants used quote marks to highlight the word 'accidental' or 'accidentally' when describing Laura's death. This pattern appears to indicate that participants are acknowledging the existence two opposing explanations for the narrated events, and may be read as an example of readers dissociating beliefs from the characters that hold them:

The narrator has received notification of her sister's death in a car 'accident'. (Participant 1-32).

Finally, nine participants used quote marks to indicate that a given word or phrase had been used in a metaphorical sense, with eight participants specifically identifying the blended world created by the sentence 'She was washing her hands of me.'

These gloves implied to the protagonist that her sister wished to 'wash her hands' of the relationships in her life. (Participant 2-4).

Again, even though the wording of the source text was not reproduced exactly by any of these participants, these examples appear to illustrate again the foregrounding effect of a particular linguistic choice. In this case, the effect is significant even though the use of the phrase 'to wash one's hands' is used frequently in English to evoke a sense of dissociating oneself from something, and would conventionally be regarded as a 'dead metaphor' (Short 1996: 19; Wales 2014: 267).

These findings suggest that particular linguistic formulations can contribute to readers' long-term memories of a text. Alongside this, however, we must balance the claim that forming vivid mental images is a common response to reading fiction (Gregory 2016). In this context, it is interesting to note Werth's own description of processing a text as envisaging a 'mental picture' (1999: 9). Analysing a passage of description from Forster's *A Passage to India*, Werth offers a sketched map of the scene which he claims represents his own text-world representation of the topic of the discourse. If text-world mental representations are wholly or partly analog rather than analytic in nature, this raises important questions. For example, Werth's sketch (1999: 9) retains an approximate correlation between the order of the linguistic prompts in the source text and the left-to-right arrangement of the corresponding elements on the page, but is otherwise non-hierarchical. However, readers experience narratives such as Forster's as discourses unfolding in time. Therefore the question of whether text-worlds are experienced and recalled as holistic entities becomes significant. A full discussion of this topic is beyond the scope of this theses, but would merit future investigation. Here

the Cognitive Grammar concept of summary vs sequential scanning (Langacker 2008, Giovanelli and Harrison 2018, Harrison et al 2017) could be significant.

Questions about the analog or analytic nature of text-world representations are also important if we consider how much of a text-world can be conceptualised at once. Limits to working memory which I discussed in Section 2.3 may prevent readers from experiencing detailed text-worlds such as those prompted by Forster's text as single holistic representations of the kind implied by Werth in his illustration. In Chapter 2, I suggested that the ability to 'chunk' information was a crucial strategy for increasing the utility of working memory. Given this, entity representations of the kind described by Emmott (and described in Section 8.2) may be a crucial tool for comprehending lengthy discourses. If so, then understanding the material properties of these different kinds of representations may be important for understanding how information is consolidated as discourses progress. For example, readers encountering a description of a character may create a vivid mental picture in the moment of reading, but may subsequently consolidate this while shifting attention to other world-building elements, while retaining an ability to keep track of the presence of the character in the text-world (an ability that Emmott 1997 discusses in detail). This behaviour would be compatible with data from my *Blind Assassin* study, in which fewer Group 2 participants included descriptions of Laura's physical appearance, having subsequently read more text than Group 1 participants, though my data certainly cannot be taken as proof of this.

Whether or not this entity representation explanation is accurate, further investigation of how working memory capacity is directed during the comprehension of text-worlds prompted by long stretches of discourse may be productive. The situation model framework which I explored in the previous section implied that a reader's 'current model' was a homogenous construct in the working memory. However, Stockwell's (2009) 'attention-resonance' model has challenged the notion that we can think about readerly attention in binary terms:

Figure/ground in cognitive linguistics and in cognitive poetics tends to be regarded as a polar category, whereas from the perspective of scaled readerly attention, it is a cline of prominence, ranging through degrees of foregrounding into vague, undifferentiated background (Stockwell 2009a: 22)

Stockwell's account of clines of readerly attention is one which appears to be compatible with the 'landscape' model of working memory function (Van den Broek and Gustafson 1999, and Section 2.3.1 of this thesis). If so, then further study of how readerly consolidation processes occur during the creation and updating of a single text-world (as well as when multiple text-worlds are combined) may be productive.

While such an investigation is beyond the scope of this thesis, data from *Blind Assassin* survey provides hints of how this phenomenon might be explored in future studies. Reviewing the prompt text seen by Group 1 participants (reproduced in Appendix A), it can be seen that the initial text-world prompted by Iris's description of Laura's accident contains significantly more world-building elements and function-advancing propositions than any other world prompted by the text. Revisiting the Group 1 results and noting how many times each world-building element is listed reveals interesting results. The most notable finding is that of the twelve discrete world-building elements prompted by the text, three occur much more frequently. Iris's sister Laura was mentioned in 92% of summaries, the car in 78% and the bridge in 78%, while the next-most-frequently mentioned world-building element, the ravine, was mentioned by only 17% of participants. Moreover, these three most commonly reproduced elements were often mentioned together as part of a single function-advancing proposition, as they are given in the prompt text:

Ten days after the war ended, my sister Laura drove a car off a bridge. (TBA3)

the narrator's sister Laura has driven her car off a bridge (Participant 1-8)

the narrators sister Laura has driven her car off a bridge and has died. (Participant 1-54)

Though the responses of participants 1-8 and 1-54 were similar, other participants offered alternative construals of the same information, for example by attributing agency to the car rather than to Laura:

The narrator's sister has died after her car came off a high bridge (Participant 1-72)

Nonetheless, the high prevalence of references to this event in summaries, instead of to other potentially memorable details (such as the car bursting into flames, mentioned by just 13% of participants), is likely to be significant. Several potential explanations might account for this pattern. In the original text, the relevant function-advancing proposition is the only one associated with this text-world which describes a human enactor. Stockwell, drawing comparison between readerly attention and patterns of visual processing, has suggested that readers are likely to pay more attention to human figures in a scene: (2009a: 24). At the same time, this function-advancing proposition is the first one encountered, meaning that the primacy effect, which suggests that readers are more likely to remember the first item in a list (Corsini 1999: 754), may contribute to readers' propensity to remember the information and subsequently include it in summaries. While this single study does not offer proof that particular cognitive mechanisms are significant, it does suggest that the different world-building elements and function-advancing propositions associated with a single text-world may attract and hold attention differently as reading continues. As a result, different elements may be given more prominence as discourse is remembered and recalled.

Another potentially interesting finding concerns the ways in which participants reconstructed the scene that Iris presented. Iris's account described Laura's car 'smashing through the treetops feathery with new leaves' (TBA: 3). Of the eleven participants who reflected this detail in their summaries, nine made reference to 'trees', and only a single participant reproduced the word 'treetops'. However, two participants noted that the scene took place in the springtime; a fact that was not stated explicitly in Iris's description, but was inferable from the description of 'new leaves'.

The one participant who did include the word 'treetops' in their summary preceded it with the word 'feathery' which they enclosed in quotation marks, implying that this word formed an important part of their memory of the scene. These results suggest that participants are remembering mental representations prompted by the discourse as well as linguistic details, but also that linguistic labels do form an important part of mental representations of discourse, at least for some participants. Further studies designed to explore the nature of text-world representations - and whether text-world mental representations are complex combinations comprising elements of different modalities - would therefore be informative. In such a study, a focus on emotion as a discrete form of mental imagery, alongside mental images in other modalities, is likely to be productive.

8.4 - Text-Worlds and Storyworlds

In Section 8.2 of this thesis, I argued that if we are to account for readers' long-term mental representations of narratives, we need to take account of two distinct kinds of representations: readers' memories of specific text-worlds or modal-worlds, retrieved through a process of world-retrieval; and readers' growing body of 'background knowledge' about the most ontologically prior world projected by a text, which may be stored in different configurations, and possibly be comprised of different kinds of mental representations. In this section, I explore the idea that we may be able to speak about these alternative structures using the existing storyworlds framework (Herman 2002, 2009; Ryan 2019, 2022; Ryan and Thon 2014 and Section 3.4 of this thesis).

In order to build this case, I now wish to reconsider what it means to talk about the world projected by a fictional text. In Section 3.3.3.1, I noted that in prototypical heterodiegetic narratives, readers frequently treat the initial text-world prompted by a fictional narrative as an accurate description of a fictional world. I also qualified this by noting that when reading some less prototypical narratives, readers may conceive of a world which is ontologically prior to the initial text-world, and which may differ from it. I discussed above the example of *Alice in Wonderland*, in which readers learn that the affairs recounted in the initial text-world are eventually revealed to be taking place within a

dream. Another such example is presented in Harrison and Nuttall's re-reading of Atwood's 'The Freeze-Dried Groom', in which they suggest that on re-reading the text, they and other readers reconceptualise events narrated at same ontological level as the initial text-world as comprising the contents of a police report. Both these interpretations require readers to contrast the initial text-world with a more ontologically prior world projected by the text.

In Section 3.3.5 I discussed how examples of homodiegetic narration prompt the creation of an initial 'empty' text-world, in which the narrator resides, which is distinct from the epistemic modal-world in which a reader conceptualises the affairs which the narrator describes. I explored this phenomenon in more detail in my own reader-response studies in Chapters 6 and 7. Here I suggested that comprehension of my chosen source texts frequently involves a process of comparing and contrasting states of affairs in the epistemic modal-worlds created by the narrator's testimony - as well as ontologically deeper modal-worlds created by the reported testimony of other characters - with states of affairs in this initially empty text-world. I also suggested that readers selectively map some world-building elements and function-advancing propositions from more remote epistemic modal-worlds into a growing mental representation of the world in which the narrator resides, and which corresponds to the most ontologically prior world projected by the text.

It might seem tempting to think of this process as 'filling' an initially empty text-world. However, I suggest there are two reasons why this may not be a helpful way of describing the consolidation processes that I have documented. Firstly, as my discussion of the narrative structure of *The Blind Assassin* has demonstrated, this process is not one that is limited to the comprehension of homodiegetic narratives, but also occurs when discourse participants attempt to build an understanding of states of affairs in a single fictional world by combining information from discourses of different types. These may include heterodiegetic narratives which do not, on their own, prompt the creation of initially empty worlds. Secondly, as I have attempted to argue in this chapter, a reader's evolving mental representation of the most ontologically prior world projected by the text may be very different in kind to the text-world mental representations that are created in the working

memory in the moment of reading. For example, it may be stored in the form of entity representations as well as, or instead of, discrete representations of particular narrative events. It may be comprised of mental representations with distinct material properties, consisting, for example, of information stored in propositional rather than imagistic form. It is also likely that this evolving representation will ultimately contain more information than can be attended to at once in the working memory.

In other words, I am suggesting that Text World Theory needs to adopt a way of describing the growing mental catalogue of background knowledge that a reader builds and maintains about the most ontologically prior world projected by a fictional text. In heterodiegetic narratives this world may correspond to the initial text-world projected by the text, but this need not necessarily be the case. In homodiegetic narratives told by a single narrator, this world corresponds to the empty-text world from which the narrator narrates. In complex narratives told by multiple narrators, this world corresponds to the world in which multiple homodiegetic narrators reside, and about which any heterodiegetic narrator purports to offer an accurate description. (Naively, readers may conceive of this construct as the 'reality' of the fictional world projected by the text, though this concept causes problems in theoretical terms.) In many cases, states of affairs in this world may be identical to states of affairs in worlds already accounted for in the Text World Theory framework, and its existence as a discrete ontological identity may not be foregrounded during reading. However, narratives such as Atwood's reveal cases where an awareness of this discrete ontological construct is necessary to provide a complete account of comprehension.

Rather than introducing a new construct, I suggest here that we may be able to draw on the existing storyworlds model to fill this current gap in Text World Theory. In other words, I am suggesting that we can regard Text World Theory and the storyworlds model not as alternative or competing frameworks, but as complementary models that each account for different aspects of narrative comprehension.

To build this case more rigorously, I now consider five reasons why it might make sense to consider the storyworld framework as a good candidate for describing these alternative mental representations in long-term memory.

8.4.1 - Multiple Text-Worlds and a Single Storyworld

A typical fictional narrative may prompt a reader to create many hundreds or thousands of different text-worlds and modal-worlds during moment-by-moment discourse processing. These exist at different conceptual distance from each other, and are typically related to each other through parent-child relationships. This parent-child relationship is asymmetrical, in the sense that a text-world or modal-world can give rise to any number of child text-worlds, but can only ever have one parent text-world. Thus, for any given fictional discourse, we can always identify exactly one most ontologically prior text-world in the conceptual structure.

In the storyworlds model, by contrast, prototypical fictional narratives prompt the creation of just one storyworld, and it is normal to speak of *the* storyworld projected by a text. Moreover, Ryan has made a connection between the existence of a single storyworld and the notion of 'fictional truth':

a narrator located in what is from the viewpoint of author and reader an alternative possible world presents a report that passes as a representation of an autonomous reality. [...] If readers are to construct a mental image of the fictional world, they must therefore take the narrator's declarations at face value. (An exception must be made in the case of unreliable narration but even unreliable narrators must be believed most of the time for the inconsistencies in their reports to be detected). The author instructs the reader to regard certain statements as true in the fictional world, and these 'fictional truths' [...] cannot be contested without violating the conventions of the genre. (Ryan 2022: 34)

Ryan's notion that the act of reading fiction involves treating a storyworld as if it were an autonomous reality is compatible with the suggestion that readers compare the text-worlds created by acts of narration with a single most ontologically prior world in the Text World Theory framework. As has been noted (Bell 2010: 24), fictional realities do not exist. However, in Ryan's formulation of the storyworld model, reading fiction involves an act of recentering which 'consists of regarding the fictional world as actual' (2022: 43). For Ryan, this imaginative act is essential to playing the fiction 'game'. In my *Blind Assassin* responses, I showed how some readers combined information from many different text-worlds at many different ontological levels to provide summaries of a single state of affairs, and described this state of affairs as if it were the reality of the world from which Iris narrates. In my proposed extension to the Text World Theory framework, such summaries would also count as descriptions of states of affairs in the storyworld projected by the text.

As Ryan has noted (2022: 14), there are many cases of less prototypical narratives which project more than just a single storyworld, and *The Blind Assassin* with its embedded story-within-a-story provides just such an example. However, this need not cause problems if we acknowledge that such embedded stories represent discrete acts of discourse that take place within a fictional world, and that a second act of fictional recentering is required in order to comprehend such instances.

8.4.2 - Storyworld Scope

As I noted in Chapter 3, storyworlds are conceived as being ontologically complete in scope. In other words, readers comprehend a text by imagining that any given statement about the projected storyworld can be ascribed a true or false status, even if that status is not defined by the text. A key argument for expanding the Text World Theory model is the need to account for the ways in which listeners and readers treat states of affairs in a fictional world as potentially knowable, while at the same time understanding that a narrator's account of events may not reveal every detail about a fictional world, or accurately reflect states of affairs in the text-world from which they narrate. In my *Surfacing* and *Blind Assassin* studies, I presented evidence of readers keeping track of their degree of

certainty of events in the most ontologically prior world projected by a text, and distinguishing these from the claims made about the novels' homodiegetic narrators. In my proposed amendment to Text World Theory, such claims can be regarded as evidence that readers are attempting to build a mental representation of a storyworld that exists independently of the ontologically incomplete text-world representations that prompted it. Moreover, I have suggested that we cannot account for the comprehension of unreliable narratives such as *Surfacing* or the *Blind Assassin* without accounting for readers' awareness of differences between individual text-worlds which are ontologically incomplete in scope, and an ontologically complete, most ontologically prior world. The ontologically complete storyworlds described by Ryan appear to be a good match for this additional construct.

8.4.3 - Text-Worlds, Storyworlds and Linguistic Prompts

As I noted in Chapter 3, Text World Theory and the storyworlds model have different aims. Text World Theory is primarily a linguistic theory. As such, it offers an account of the mental representations that readers construct during moment-by-moment discourse processing in response to specific linguistic prompts. The storyworlds framework, by contrast, describes mental representations of narratives that may or may not be instantiated in text (see Herman 2009 and Section 3.4 of this thesis). According to the storyworlds model, a reader or listener's representation of the fictional world projected by a text is created in response to that text, but is not necessarily restricted to elements that are explicitly linguistically motivated. Instead, readers and listeners are able to imagine, or to make inferences about, fictional events for which there is no corresponding text-world. Indeed, Ryan has claimed that the potential of a text to prompt such imaginative acts is a necessary condition of a text projecting a storyworld:

Whether a text displays a storyworld or only asserts propositions is admittedly a subjective disposition, since readers differ in their willingness to engage with certain types of content, but the decision rests on a dependable guideline: when a text creates a

storyworld, *we imagine that there is more to this world than what the text represents.*

(Ryan 2019: 70, emphasis in original)

The notion that discourse participants create mental representations of states of affairs that are not directly prompted by a text has been already been addressed from a Text World Theory perspective. As I discussed in Section 3.4.1, Whiteley (2010) has explored the idea that narrative comprehension often involves imagining non-narrated as well as narrated events. This element of narrative comprehension is reflected in my own *Blind Assassin* study, in which I provided evidence of readers making inferences or presenting hypotheses about states of affairs at the most prior ontological level projected by a text, for which no corresponding text-world representation existed (See Section 7.4.3). Acknowledging that readers create both text-world and storyworld mental representations would be one way of recognising this aspect of narrative comprehension within the Text World Theory framework.

8.4.4 - Text-Worlds and Non-Narrative Discourses

Ryan's claim that narrative texts necessarily stimulate the imagination suggests there is a distinction between narrative comprehension and the comprehension of other discourse types. Text World Theory already acknowledges that different acts of communication result in different conceptual structures. The empty text-worlds prompted by homodiegetic narratives (and discussed in chapters 3, 6 and 7 of this thesis) are not required to account for non-narrative discourse encounters such as negotiating a sandwich purchase, reading a parenting manual or deciphering instructions for repairing a motor vehicle (examples discussed in Gavins 2007). Gavins (2007) and Lahey (2014) have also noted key differences between such non-fictional texts and examples of heterodiegetic narration, arguing that in the latter case, the text-world projected by a narrator should be regarded as an enactor-accessible epistemic modal-world. In this case, 'the text-world from which all the other worlds [...] spring is in fact one which contains a projected enactor of the reader in communication with his or her

mental representation of the narrator' (Gavins 2007: 130). Thus, in Text World Theory, comprehension of both homodiegetic and heterodiegetic narration requires the reader to project an enactor of themselves into a world containing a representation of a narrator, which is distinct from their representation of themselves and the speaker or writer in the discourse world. This account is compatible with Ryan's notion (discussed above) of fictional recentering. The fact that not all discourses require such acts of projection into ontologically prior text-worlds is compatible with Ryan's notion that not all discourses result in storyworld formation. Furthermore, since the contents of such ontologically prior worlds are not defined exclusively through explicit linguistic prompts, any awareness of differences between these worlds and the epistemic modal-worlds created by the narrator's imagined discourse relies on the reader supplying alternative states of affairs: a claim which is compatible with Ryan's notion that texts which project storyworlds stimulate the imagination and invite the listener or reader to imagine non-narrated events. In other words, there seems to be a good correspondence between the ontologically prior worlds projected by narrative texts, and storyworlds as Ryan describes them.

Discourses such as face-to-face conversations about upcoming purchases or written instructions for technical tasks result in text-world conceptual structures that are clearly distinct from those prompted by acts of fictional narration. However, Ryan notes the existence of what she calls narratoids which she suggests are not storyworld forming (2019 and Section 3.4.2 of this thesis). It is therefore instructive to consider this point with respect to the example narratoid that Ryan provides: 'The king died, then the queen died of grief' (2019: 69). Considered from a Text World Theory perspective, this short discourse results in the creation of a text-world populated by two characters, which progresses as a result of two function-advancing propositions. However, the discourse provides no contradictions. Nothing in the text foregrounds the possibility of discrepancies between narrated events and events in a discrete ontologically prior text-world, and a reader is not required to establish entity representations in order to store and retrieve information about the characters. Thus there is no need for a reader to contrast a mental representation of an ontologically prior world that is

independent of the text-world created by the moment-by-moment experience of the original discourse. By contrast, appreciating Ryan's micronarrative example 'For sale, baby shoes, never worn' (2019: 69) invites the reader to juxtapose a mental representation of an inferred tragedy with the mental representation which is created in response to the text itself. This process, I suggest, is not simply a process of gap-filing through inferencing, since it relies on an awareness of the juxtaposition between two discrete mental representations which have different ontological statuses. It is this distinction which Ryan associates with storyworld formation, and therefore it once again seems reasonable to adopt the concept of a storyworld to describe the most ontologically prior worlds of fictional narrative comprehension in the Text World Theory model.

It is important to note at this stage that my arguments so far have focussed on the creation of text-worlds and storyworlds in response to works of fiction (or works that are read as fictions by their readers). Ryan (1991, 2022) has written extensively on the distinguishing characteristics of narratives and fictions. It is beyond the scope of this thesis to consider in detail how my proposed addition to Text World Theory would account for the comprehension of factual narratives. However, I note here that comprehension of factual narratives involves a listener or reader considering the existence of an ontologically complete reality that exists independently of any narrative told about it. I note also that listeners and readers are also capable of understanding that not all stories which claim to describe the real world are necessarily factually correct. Thus, a process of tracking discrepancies between the text-worlds prompted by a purportedly factual story and existing mental representations of the real world can be a significant feature of factual narrative comprehension. Without offering a full theoretical justification, it seems reasonable to assume that Ryan's storyworlds offer a fictional counterpart of real-world knowledge, if we assume that similar cognitive processes are involved in the comprehension of factual and fictional narratives.

One other point worth considering is the applicability of the storyworld model to genres such as lyric poetry, which may describe fictional events but differ from prototypical narratives. Ryan herself

is dismissive of the idea that such texts are storyworld forming. Distinguishing the narratological concept of a storyworld from more informal uses of the term 'world', she argues:

Second (and this point may seem obvious), [a storyworld] requires narrative content, so the applicability of the concept of a storyworld to lyric poetry is questionable. (Ryan and Thon 2014: 34)

Again, a full discussion of the extent to which a lyric poem can be said to contain narrative content is beyond the scope of this thesis. For this reason, I do not offer a rigorous discussion of whether my proposed addition to Text World Theory is necessary to account for the comprehension of lyric poetry. I note however, that rather than attempting to address this question by attempting to establish formal characteristics of lyric poetry as a genre, it may be worth considering the different ways in which readers can approach such texts. Here, Ryan's suggestion that storyworld-forming texts inspire acts of imagination may be helpful. In cases where readers treat a lyric poem as a prompt to imagine entities or events beyond those depicted in the text, it may be necessary to distinguish such mental representations from those created in response to explicit linguistic prompts, in which case there may be a need to describe such storyworld-like representations.

I note the benefits of exploring questions of non-fictional narratives and lyric poems further in my suggestions for further work in the following chapter.

8.4.5 - On the Nature of Storyworld Representations

My final reason for considering storyworlds as good candidates for describing the additional mental representations I am arguing for in Text World Theory is that the storyworlds model appears compatible with the idea that readers' long-term mental representation of narratives may be very different in kind to the working memory constructs that readers generate in the moment of discourse comprehension.

If readers construct a mental representation of a single storyworld from a lengthy narrative, which they enhance and refine as a narrative continues, then storyworlds must necessarily have a presence in the long-term memory. In presenting my own experimental data in this thesis, I have argued that readers' long-term mental representations of narratives are not simply amalgamations of individual text-world representations, since readers frequently produce summaries of narratives which show evidence of consolidation processes, such as the blending of multiple text-worlds with different ontological status. Such consolidation processes frequently involve the separation of 'background knowledge' of entities such as characters from knowledge about the original circumstances in which this knowledge is learned: a process that both Emmott (1997) and Werth (1999) suggest typifies the ways in which readers store long-term knowledge about entities in the real world. This prediction tallies with a key trait of fictional characters that Ryan claims is necessary for storyworld formation. Ryan argues:

the fullest of characters are those that speak so strongly to the imagination that they live beyond their text, whether this life inspires transfictional developments or remains within the readers' minds (Ryan 2022: 83)

In this model, consolidating information about a character from its original text-world conceptual structure into something like Emmott's entity representations would account for readers' abilities to understand that two different discourses can be about the same character, and to transpose the same character from one storyworld to another (a phenomena which Ryan terms 'transworld migration: Ryan 2022: 15). Thus, listeners and readers conceptualise fictional characters as more than just entities which fulfil roles within particular plot structures (as suggested by structuralist theories of narratology; Frow 1986), and instead comprehend them using similar strategies to those they use to create and update representations of people in the real world.

8.4.6 – Reconciling Text World Theory and the storyworlds model

Throughout Section 8.4, I have argued that the storyworld mental representations described by Herman (2002, 2009), Ryan (2019, 2022) and Ryan and Thon (2014) have much in common with readers' long-term mental representation of a fictional text that are not currently account for in text-world terms. For this reason, I now propose that the concept of a storyworld might usefully be added to Text World Theory.

In this context, I propose to define a storyworld as a listener or reader's evolving mental representation of the most ontologically prior world projected by a fictional text. Informally, we might think of this as a 'best guess' about what is 'really' happening in a fictional world. As has been noted elsewhere however (for example Bell 2010: 24), the notion of fictional truth is problematic. All fictional texts project ontologically incomplete worlds, and in many fictional texts significant meaning may be ascribed to the fact that a narrator's testimony leaves significant ontological gaps. Nonetheless, I have argued that a desire to conceptualise and populate an ontologically prior storyworld remains a significant motivation for many readers, even if this desire is ultimately frustrated. In Chapter 6, I suggested that readers' responses to detective stories (of which *Surfacing* can be read as an example) provide good illustrations of this motivation.

In my proposed model, listeners or readers encountering a fictional text will begin the process of comprehension by creating an initial text-world in which they conceptualise the state of affairs described by the narrator. This text-world will be populated in response to explicit world-building elements present in the text, and by inferences made by a listener or reader to 'fill gaps' in the narrator's testimony using their own background knowledge. In some cases, I suggest that no additional mental representations are required to provide a complete account of the comprehension process. In other cases however, readers may quickly begin to keep track of discrepancies between their initial text-world representation - prompted explicitly by the narration - and inferences they are making consciously about the world the narration describes. I have argued that this process is needed to account for readers' experiences of deciding that a narrator is unreliable. However, I suggest that

the same process may in fact be a very common strategy employed in the comprehension of narratives of all kinds. For example, Short has noted that many modern novels begin by withholding key information for rhetorical effect; a technique known as '*in media res*'. He describes his experience of reading the opening lines of John le Carré's *The Little Drummer Boy*:

[T]he use of the definite article [...] forces us to take on the position of people who know what these phrases refer to, even though we do not [...] We have to position ourselves as if we are right there with the German authorities, trying to work out what is going on' (Short 1996: 168, my emphasis)

In such contexts, I suggest that we need to distinguish readers' text-world mental representations from the mental representations they are attempting to build of the world of which the narrator's account purports to be a description. Thus, listeners or readers will simultaneously build and maintain a discrete, evolving storyworld mental representation, and compare this to the text-world representations which are created moment-by-moment as discourse progresses. In Chapter 6 I described my own experience of reading *Surfacing*, in which an example of narrative under-reporting led to a later instance of world-repair as I subsequently corrected an incorrect inference I had made about unnarrated events. I suggest that examples such of this arise not because of direct contradictions in the narrator's testimony, but from a process of comparing text-world and storyworld mental representations.

This revised account of comprehension is one that would benefit from further exploration and testing. One way to do this would be by asking readers to read the opening paragraphs of a range of different narrative texts line-by-line, following a 'think-aloud' protocol (Miall 2007: 29-21, Whiteley and Canning 2017: 75) as they did so. Exploring reader responses to explicit linguistic clues (such as the presence or absence of markers of the *in media res* style) may yield interesting findings about the processes of inference-making and world-repair made

as discourse processing continues. In particular, it would be useful to pay attention to the kinds of inferences that are made unconsciously in the moment of reading, and which are not noticed until subsequently corrected. Such a study could provide more details about how discrete text-world and storyworld mental representations are created and maintained.

8.5 - Summary

In this chapter I have attempted to sketch a framework for how Text World Theory might be expanded to account for readers' long-term memories of narratives. I have drawn on my own experimental studies to argue that Text World Theory, in its current form, is not sufficient to account for the ways in which readers produce consolidated summaries of narratives, and have also made a case that we need to account for readers' growing store of background knowledge about states of affairs in the most ontologically prior world projected by a fictional text. Rather than proposing a new theoretical construct to describe the consolidated mental representations of narratives that readers create in the long-term memory, I have suggested that it is worth exploring whether the storyworlds model can be incorporated into the Text World Theory framework for this purpose. I have also explored how Fauconnier's notions of consolidation and float might be adapted to account for how such consolidated storyworld representations are created.

In attempting to reconcile the two frameworks, I have suggested that in some cases readers may recall their moment-by-moment experiences of individual text-world mental representations alongside a growing storyworld representation when they remember a fictional narrative. I have also suggested that in other cases, memories of individual text-worlds may not be recalled, and readers may draw only their storyworld representation when they recall details about a fictional world. I have argued that the fact that reader summaries contain evidence of both kinds of processes suggests that Text World Theory and the storyworlds model offer complementary accounts of narrative comprehension, and that both models may be needed to provide full account of narrative recall.

In the penultimate chapter of this thesis, I draw on my proposed framework to produce my own reading of another Atwood text, and argue this model accounts for aspects of comprehension that Text World Theory in its current formulation cannot explain alone.

9. Case Study 3: Atwood's 'Alphinland' Stories

In this chapter, I explore how an extended Text World Theory, as outlined in Chapter 8, might be used to account for comprehension processes that readers engage in as they read Margaret Atwood's 'Alphinland' short story sequence. The analyses I present in this chapter are based on my own introspective readings of the texts I discuss. In this respect, the evidence I use to support my arguments is more limited than that from the studies I have presented based on data from a hundred or more participants. However, this approach allows me to draw upon specific examples gathered from disparate parts of three different short stories, and to focus on several different features of my own reading experience, in a way that would be hard to replicate through reader-response studies with multiple participants.

'Alphinland' is the first story in Atwood's *Stone Mattress* anthology (2014). It is set in the same fictional world - and therefore shares a storyworld - with the following two stories in the collection, 'Revenant' and 'Dark Lady'. In addition to this, it also shares themes with the other six stories in the anthology, and this thematic similarity is foregrounded in my edition of the collection by the strapline 'nine wicked tales' on the front cover. The challenge of interpreting the individual stories within the context of the collection as a whole is one which commonly occupies academic critics (for example, Howells 2017; Snaith 2017). However, a recent reader-response study (de Vooght and Nemegeer 2021) has suggested that producing unified readings of disparate works in a collection is not a strategy undertaken by most readers in non-academic contexts. In this study, therefore, I focus firstly on the 'Alphinland' as a standalone text, and secondly on its relationship to the two stories - 'Revenant' and 'Dark Lady' - with which it shares a cast of characters, without considering how the other stories in the collection might affect interpretations.

'Alphinland' is a heterodiegetic narrative that focusses on the experiences of Constance, the author of a series of fantasy novels set in Alphinland, a fictional realm which 'currently lives on her computer' (SM: 16). As the story sequence progresses, various parallels are drawn between characters in the Alphinland storyworld and characters in the world in which Constance resides, leading academic

critics to explore the ways in which readers draw parallels between the two ontological domains. Snaith suggests that the *Stone Mattress* collection as a whole portrays its protagonists 'utilising the realm of a cyberspace in order to forge their own identity' (2017: 118), while Howells claims that 'Alphinland' in particular recounts 'a slippage between external reality and Constance's inner world of imagination' (2017: 300). Thus, one strategy open to readers is to interpret the story by attempting to establish parallels between characters and events that unfold at different ontological levels.

'Revenant' and 'Dark Lady', both also narrated by a heterodiegetic narrator, focus on other characters who inhabit the same fictional world as Constance. 'Revenant' is focalised through Gavin, one of Constance's ex-boyfriends, who Constance has 'preserved in a state of suspended animation' in the world of Alphinland (SM: 22). 'Dark Lady' is focalised through Marjorie, a woman whom Constance catches Gavin in bed with during their relationship. Across the sequence, several incidents are re-narrated in multiple stories. Thus, the sequence as a whole provides a useful counterpoint to *The Blind Assassin*, which I discussed in Chapter 7. The device of re-narrating the same events from different perspectives echoes Atwood's practice in *The Blind Assassin*, and from elsewhere in her oeuvre (see, for example, Harrison 2023). However, Atwood's choice to employ a heterodiegetic narrator in all three stories allows me to explore how the model I developed in response to examples of homodiegetic narration is more widely applicable. Moreover, while each of these stories could be considered a complete discourse in its own right, the fact that all three refer to a common fictional world prompts interpretive strategies that are not relevant if each story is considered in isolation. The 'Alphinland' stories thus provide a good test case for demonstrating how a storyworlds approach can complement a traditional Text World Theory analysis. While Atwood's chosen form is unusual, I argue that the short story sequence does not demand unique interpretive strategies from the reader, but merely foregrounds strategies that are employed more commonly in the interpretation of long narratives of all kinds.

I begin my analysis by focussing on how readers establish a storyworld in 'Alphinland', and then go on to consider the effect of reading the other two stories in the sequence. My analysis

assumes that a first-time reader encounters the stories in the order they are presented in my edition of the collection, though it is acknowledged that not all readers will necessarily approach the anthology in this way.

9.1 - Building Text-Worlds and a Storyworld for 'Alphinland'

'Alphinland' begins as follows:

The freezing rain sifts down, handfuls of shining rice thrown by some unseen celebrant. Wherever it hits, it crystalises into a granulated coating of ice. Under the streetlights it looks so beautiful: like fairy silver, thinks Constance. But then, she would think that; she's far too prone to enchantment. (SM: 1)

The story opens by asking readers to conceptualise a minimally-defined initial text-world. The spatial parameters are initially unspecified, but the use of the present tense anchors the conceptualised events at the same moment in time as the act of narration. This initial text-world is populated in this opening passage by a single world-building element; 'freezing rain'. The text then offers an example of metaphorical language use by likening the rain to 'handfuls of shining rice'. According to conceptual integration theory (Fauconnier and Turner 2002 and Section 2.2.5 of this thesis), readers who encounter instances of metaphorical language of this kind create mental representations which blend features of two input spaces. In this case, one input space would contain 'freezing rain' and the other 'shining rice', and the resulting blended space may contain meanings that are not present in either input space but emerge from the blending of the two concepts. Gavins (2007: 146-9, 2016: 452) incorporates this idea into Text World Theory by suggesting that such metaphors result in 'blended worlds' which exist alongside their parent (matrix) text-worlds and which, like Fauconnier and Turner's blended spaces, may contain emergent structure. Readers may then map this emergent structure from these blended worlds back into the parent text-world and update its contents accordingly. When

reading this passage my conceptualisation of 'freezing rain' resulted in a mental picture of long thin raindrops. I also experienced an aural image of the sound of solid raindrops/rice grains landing on a hard surface. In my mental blend of 'freezing rain' and 'rice', the rice was hard and uncooked, and hence I imagined both the rice and the rain - which I would otherwise think of as nourishing - as being unappealing or unsustaining; an emergent meaning that was not conveyed by the idea of 'freezing rain' alone.

Atwood's text goes on to specify that the rice in the blended world is thrown by 'some unseen celebrant'. In Text World Theory, examples of negation (such as the word 'unseen') result in the creation of negated worlds in which discourse participants conceptualise the states of affairs that are reportedly absent in the parent text-world (Gavins 2007: 102). Thus the first human figure the reader encounters appears only as a 'lacuna' (Stockwell 2009a: 31); conceptualised in a negated epistemic modal-world but understood only as an absence in the initial text-world in which he or she is not seen. This absence, in conjunction with the notion of something cold and unsustaining, instilled in me a sense of melancholy. Thus, these opening lines, with their distinct pattern of blended and negated epistemic modal-worlds, was responsible for my creating a vivid mental image with elements that spanned three different modalities: vision, sound and emotion. However, my experience of re-reading the text, some weeks after my first reading, was that only the presence of the rain and the sense of melancholy were familiar from my initial reading. In other words, I had forgotten much of the detail of my original mental images, along with much of the conceptual structure prompted by my original reading. I had remembered only detail in the initial text-world, along with a memory of the emotional response the reading generated, which I associated entirely with initial text-world events.

Atwood's text continues with the sentence 'Wherever it hits, it crystallises into a granulated coating of ice'. Gavins suggests that when readers process blended worlds, the original input text-world from which the blend emerges retains its prominence (2007: 149), so readers are likely identify the pronoun 'it' with the previously mentioned 'freezing rain', and to add the subsequent details to a growing list of world-building elements in the initial text-world. The phrase 'granulating coating',

though evocative, retains a sense objective description. However, the following sentence, 'Under the streetlights it looks so beautiful', contains an unambiguous value-laden statement (Short 1996: 265), and therefore implies a particular point of view. In the absence of any specified characters in the initial text-world, readers may briefly assign this point of view to that of an as-yet-unseen narrator. The following clause, 'like fairy silver', invites readers to create another blended world, and to use elements of the blend to update their mental image of the granulated ice. (In my reading, I imagined it glittering). However, readers then learn that this way of seeing is employed by a particular character, named Constance, and that Constance is 'far too prone to enchantment'. This subsequent revelation, created by Atwood's distinctive habit of placing the reporting clause 'thinks Constance' after the content of her indirect thought, creates a jarring reading experience, forcing the reader to engage in a retrospective shift in perspective, and draws the readers' attention to the possibility of similarities and discrepancies between the two input worlds of the blend. (This linguistic choice is similar to the one I described in my analysis of *Surfacing* in Section 6.2.1, and one I suggested was a hallmark of Atwood's style.) One consequence of this resulting shift in perspective may be to override the otherwise automatic process of mapping structure into the initial text-world, over-riding default consolidation strategies and making readers more likely to remember the conceptual structure prompted the passage. However, this device may have another effect too. 'Alphinland' has a heterodiegetic narrator, and thus the possibility of inaccuracies in the narrator's account may not be foregrounded in the same way as in a homodiegetic narration. However, heterodiegetic narration can still convey point of view through focalisation. My reaction, on reading this passage, was to be suspicious of value-laden statements associated with Constance's perspective. In other words, my attention was drawn to possibility of discrepancies between the subjective impressions that are attributed to Constance, and states of affairs in a storyworld that exists independently of Constance's experience presented in the initial text-world.

At the same time, the appearance of the proper name 'Constance' signifies the presence of a character who is likely to feature multiple times in the forthcoming narrative. As the text progresses,

the reader is presented with a growing body of knowledge about Constance, that can potentially be drawn upon during later comprehension. As I continued reading 'Alphinland', I was able to recall aspects of Constance's character, such as her propensity for enchantment, without recalling the particular text-worlds I was conceptualising when these details were first revealed. This aspect of my reading experience could be accounted for if my long-term memory of 'Alphinland' contained an entity representation for the character Constance which existed separately from my memories of experiencing individual text-world mental representations, and could be accessed without undergoing a full process of world-retrieval.

'Alphinland' continues with a description of Constance watching television reports about the ongoing snowstorm. The second paragraph begins with a sentence that contains a subordinate clause with a shift from present to past tense:

The TV screen is a high-definition one that Ewan bought so he could watch hockey and football games on it. (SM: 1)

This shift in tense prompts a world-switch, resulting in a text-world located earlier in time than its parent-world. In the absence of evidence to the contrary, I assumed on my first reading that Ewan was also present in the text-world in which the television first appeared. This later turned out to be false. However, this erroneous assumption can be accounted for by my adopting a default consolidation strategy of mapping an enactor of the character Ewan from the child-text-world into the parent-text-world, since the child-text-world established a strong link between the television set and the character. The television is described as 'a flat, high-definition one that Ewan bought so that he could watch hockey and football games on it', and the reader learns that Constance resents 'the pores, the wrinkles, the nose hairs' she is now able to see (SM: 1). This detailed description of the set ensures it receives a high degree of prominence in the reader's attention. My own reading resulted in a vivid mental image of the scene, making the resulting text-world a good candidate for future world-retrieval.

The third paragraph of the story begins with the phrase ‘Luckily, on the weather show’, followed by a description which invites readers to conceptualise the contents of the broadcast, including ‘shots of calamities: a multiple car crash pile-up, a fallen tree that’s bashed off part of a house, a snarl of electrical wires dragged down by the weight of the ice’. After several paragraphs relating events depicted on the TV news, the reader’s attention is directed back to Constance with the sentence ‘Constance turns off the TV’ (SM: 3). The reference to Constance and to the previously mentioned TV set invite readers to engage in an act of world-retrieval, rather than simply creating a novel representation using an entity-level description of Constance. Such a process of world-retrieval would allow readers to draw on prior knowledge to fill the gaps in the text-world that is created during current discourse processing. Thus, a description of Constance crossing the window and ‘watching the world turn to diamonds’ can be interpreted by creating a blended world using the ‘diamonds’ and the ‘freezing rain’ mentioned earlier in the story as its two input spaces.

Shortly after this comes a paragraph which begins with the line “‘You’ll need salt”, says Ewan, right in her ear’ (SM: 3). As I have already indicated, on my first reading of the story the text-world I retrieved to conceptualise this passage of the story already contained an enactor of Ewan, so his appearance at this point in the story merely re-enforced the erroneous assumption I had already made. However, the story then continues:

The first time he spoke to her it startled and even alarmed her – Ewan having been in a no longer tangibly living condition for at least four days (SM3)

Two shifts in tense in this sentence - the first into the past, prompted by ‘The first time he spoke to her’, and the second into the present perfect prompted by ‘having been’ - prompt two world-switches. This requires the reader to conceptualise three discrete enactors of Ewan: one in the same time frame as Constance watching television, one at the prior moment representing ‘the first time he spoke to her’, and the third existing ‘for at least four days’ before that. The text then cues the creation of a

negated epistemic modal-world, with the revelation that Ewan is 'no longer in a tangibly living condition'. Comprehending this network of discrete text-worlds involves the reader updating information about three different enactors of Ewan simultaneously: if he has been dead for four days, then he must still be dead the first time he spoke to Constance, and on the subsequent occasion. In other words, knowledge of Ewan's 'no longer tangibly living status' 'floats' through a chain of successive worlds, ultimately forcing the reader to engage in an act of world-repair in the text-world in which Constance is watching television. As I have already noted in my *Surfacing* analysis (Section 6.2.1), inviting readers to make erroneous assumptions and then prompting such instances of world-repair is another typical hallmark of Atwood's style.

The arrival of Ewan, and the subsequent revelation that he is dead, present the reader with a dilemma similar to the one faced by readers of *Surfacing*. In the discourse-world in which Atwood and the reader belong, dead people are not able to speak. The reader must therefore decide whether to treat the text as an example of unnatural narrative, or - already primed to mistrust Constance's perspective - to interpret her experience of Ewan's voice as a hallucination. Significantly, Atwood's text presents Ewan's speech act without using language that prompts the creation of an epistemic modal-world associated with Constance's perspective, but instead as a statement about events at the same ontological level as the initial text-world. For this reason, 'Alphinland' might be regarded as an example of unreliable heterodiegetic narration. Arriving at this interpretation requires a reader to create and maintain a discrete storyworld mental representation that contradicts the text-worlds prompted explicitly by the text. This process is therefore analogous to the one I suggested was necessary to comprehend examples of unreliable homodiegetic narration in *Surfacing* and *The Blind Assassin* in Chapters 6 and 7.

9.2 - Multiple Perspectives: Reading 'Revenant' and 'Dark Lady'

'Alphinland' can be read as an example of unreliable heterodiegetic narration in its own right. However, reading it alongside 'Revenant' and 'Dark Lady' foregrounds other examples where a

discrete storyworld representation is required to comprehend the combined narratives. The second story in the 'Alphinland' sequence, 'Revenant', opens as follows:

Reynolds bustles into the living room, carrying two pillows. An indeterminate number of years ago, those two pillows billowing upward from Rey's encircling arms like two plump, inflatable breasts, soft but firm, would have suggested to Gavin the real breasts, equally soft but firm, that were hidden underneath. (SM: 41)

The opening sentence of this story prompts the creation of an initial text-world containing three world-building elements; an enactor of the character Reynolds, a living room, and a pair of pillows. The following sentence then prompts readers to add an enactor of the character of Gavin to their developing mental representation. As with any instance of discourse comprehension, readers may draw on existing schematic knowledge of real-world living rooms to supplement the textual cues and create a more detailed mental picture of a typical interior setting. However, the reading experience of those readers who have previously read 'Alphinland' is likely to be different from those who encounter the story in isolation. In the former case, readers are likely to recognise the names 'Reynolds' and 'Gavin', and can potentially draw upon a degree of storyworld-specific background knowledge to enrich their mental representation. In 'Alphinland', as well as revealing that Constance and Gavin used to live together, the narrator informs readers that:

In real life, Gavin won a few prizes for his poetry [...] Constance receives a Christmas card from him every year; actually, from him and his third and much younger wife, Reynolds. Reynolds! What a dumb name. (SM: 22)

'Alphinland' provides a several more details about Reynolds. For example, readers learn that the Christmas cards - which she signs - enclose 'chirpy, irritating letters':

Morocco! So lucky they'd packed the Imodium! Though more recently: Florida! So good to be out of the drizzle! (SM: 23)

These lines contain information, and potentially prompt a range of further inferences, that readers will be able to draw upon when adding an enactor of Reynolds to the initial text-world of 'Revenant'. The most obvious of these is the biographical fact that Reynolds is 'much younger' than Gavin. In my reading, I also had a general impression of a 'chirpy', well-travelled and cultured woman. Retrieving such information was not, I suggest, an example of world-retrieval, since I did not find myself recreating specific scenes from 'Alphinland'. Instead, comprehension of the two stories may involve the creation of entity-representations in which an accumulation of information about the shared characters is stored. It is perhaps significant that in the original story, Atwood's prose foregrounds Reynolds as a good character for future recall, for example by drawing attention to her 'dumb' name. We can contrast this with the description of Constance's two daughters-in-law in the same story:

They [Constance's sons] had been backed up in spades by their brisk but tactful and professionally accomplished wives, the plastic surgeon and the chartered accountant (SM: 5)

Here, the two characters are barely distinguished and remain unnamed. This may hinder the creation of discrete entity representations for these characters and reduce the chance of their later recall.

'Alphinland' provides another salient fact about Reynolds. The narrator provides the reader with access to Constance's impression of the character, which is conceptualised within an epistemic modal-world:

Constance suspects that Reynolds takes an unhealthy interest in Gavin's bohemian youth, and most especially in Constance herself (SM: 23)

On my first reading of 'Revenant', I remembered Constance's suspicion of Reynolds. However, I had not incremented her 'unhealthy interest in Gavin's bohemian youth' into my storyworld representation of the character, but was instead aware that Constance's dislike was partial, and that her suspicions may not reflect reality in the shared storyworld of the two texts. In this respect, therefore, my memory of the first story retained a degree of its original conceptual structure.

The character of Reynolds appears only briefly in 'Alphinland'. Gavin, however, plays a much more prominent role in this first story. The second sentence of 'Revenant', with its description of what the previously mentioned pillows 'would have suggested to Gavin', provides the reader with a clear indication that this second story will be focalised through his perspective. Most of the events recounted in 'Revenant' unfold independently of events recounted in 'Alphinland'. As before, readers may integrate information from both stories into a growing entity-representation of Gavin; for example by combining the information that 'Gavin won a few prizes for his poetry' in 'Alphinland' (SM: 22) with the revelation in 'Revenant' that a girl is 'doing a thesis on his work' (SM: 47), to create an entity representation of a character with a successful poetry career. However, there are a handful of occasions when 'Revenant' makes explicit reference to events that are narrated in the former story. In 'Alphinland', we are told:

She [Constance] was living with another man then, in a two-room walk-up with a lumpy mattress on the floor and a shared toilet in the hallway, and an electric kettle (hers) and a hotplate (his) they were not officially supposed to have. There was no refrigerator so they put their food containers on the windowsill [...] (SM: 20)

In 'Revenant', we are presented with a description of the same location, but this time focalised through Gavin's perspective rather than Constance's:

His first live-in, Eve to his Adam. Nothing could ever replace that. He remembers the ache of waiting for her in their cramped, stuffy Eden with the hotplate and the electric kettle. She would come in through the door with that supple but luscious body of hers [...] (SM: 58)

In the second story, Gavin's reminiscence, signalled linguistically with the clause 'He remembers', triggers an epistemic modal-word and prompts the reader to create a distinct mental representation. In isolation, this world is populated only with a small number of world-building elements: enactors of Gavin and Constance, a door, a hotplate and an electric kettle. However, when I read 'Revenant' shortly after reading 'Alphinland', I recalled the juxtaposition of the hotplate and kettle, and used this as a cue to engage in an act of world-retrieval, fleshing out my currently evolving text-world representation with additional details from the description in the previous story. In this respect, comprehension of 'Revenant' is not dissimilar to comprehension of a single long narrative in which a previously visited location is described for a second time.

However, Atwood's choice to describe this scene from two different perspectives creates a particular effect for the reader. A traditional literary critical reading might draw attention to the differing emphases placed on different elements of the scene in these two differently focalised descriptions. The description focalised through Constance's perspective emphasises the practical and economic considerations faced by the young couple, noting who retains ownership of the shared kitchen equipment. (Later the reader is told that Constance's first reaction, on discovering Gavin in bed with another woman, is to exclaim 'You owe me half the rent' (SM: 29)). By contrast, the description focalised through Gavin's perspective, with its emphasis on Constance's body, foregrounds the physical side of the couple's relationship. Re-examining the scene from a cognitive perspective reveals

that something else significant is occurring. In 'Revenant', references to 'Eden' prompt the creation of a blended world. The name 'Eden', in conjunction with the previously mentioned names 'Eve' and 'Adam' provide cues to readers familiar with the relevant biblical narrative to retrieve a Garden of Eden 'narrative schema' (Mason 2019: 69) from long-term memory. The description of Constance as 'Eve to [Gavin's] Adam' can then be interpreted as an explicit cue to form a blended world with Gavin and Constance in one input space, and Adam and Eve in the second. Once this blend has been created, readers are then able to map structure from the resulting blended world back into the parent text-world, updating their mental representation of the original scene. For example, in my reading of the story, I drew upon my background knowledge that the story of Adam and Eve is frequently told as an archetypal story of temptation to infer that Gavin imagined that he had been tempted by Constance. This act of comprehension involved structure 'floating' from the blended world into the currently conceptualised text-world. At the same time, however, I was aware that this interpretation was subjective, and did not necessarily represent events that had really occurred in the storyworld shared by the two stories. Again, this reading is only possible if we acknowledge the existence of a storyworld-like mental representation that is distinct from the text-world by text-world mental representations generated in the moment of reading.

In summary then, this sequence of independent but interconnected stories highlights processes that occur when readers attempt to comprehend long narratives told from multiple perspectives. In common with Dancygier's (2007) remarks about *The Blind Assassin*, I suggest that Atwood's distinctive narrative style in the 'Alphinland' story sequence foregrounds such processes, but that these same processes can potentially occur in the comprehension of narratives of all kinds.

Having demonstrated how my proposed extensions to Text World Theory can help account for readings of a particular story, I now go on to summarise my work and make recommendations for future study.

10 - Conclusions and Suggestions for Further Work

In this final chapter of my thesis I summarise the claims I have made so far, and make suggestions for further work to explore the questions I have raised. I begin in Section 10.1.1 by restating the case for an expanded Text World Theory in the light of the reader-response studies I have reported. In Section 10.1.2, I then summarise my claim that we can draw up on the storyworlds framework as part of an enhanced Text World Theory. In Section 10.1.3 I reassess the hypotheses I offered in Chapter 3 about how text-world mental representations change after the moment of initial comprehension, reframing these in the light of my proposed enhancements to Text World Theory.

The work I have presented here is offered as an initial attempt to address the question of what happens to discourse participants' text-world mental representations of fictional narratives as they are remembered and later recalled. However, this thesis has drawn on a small number of studies using narratives by a single author. Throughout this thesis I have argued that the choice of Margaret Atwood as a case study for this investigation has allowed me to focus on some of the challenges that must be addressed if Text World Theory is to provide a complete account of the comprehension of narrative fiction. However, my choice of subject and the design of my individual studies has necessarily foregrounded some aspects of comprehension over others. A comprehensive account of how text-worlds evolve over time, even if restricted to the reading of fictional narratives, would need to draw on a wider range of examples and account for a wider range of reading experiences than it has been possible to present here. For this reason, I devote the final part of this thesis (Section 10.2) to discussing a range of ways in which this project could be extended through further investigations.

10.1 - A Summary of Findings Presented in this Thesis

10.1.1 - The Case for an Expanded Text World Theory

Throughout this thesis, I have argued that one of the strengths of Text World Theory is that it provides a rigorous account of how readers combine textual prompts with discourse-world knowledge in order

to create mental representations of the states of affairs that discourses describe. I have noted that comprehending lengthy fictional narratives requires readers to draw upon significant amounts of text-specific knowledge in order to comprehend later passages in the light of previously given information. Thus, I have argued, readers of long fictional narratives must create, update and draw upon mental representations of fictional worlds stored in the long-term memory, and these representations must be distinct from their representation of states of affairs in the world they inhabit.

In my introduction to Text World Theory in Chapter 3, I discussed existing Text World Theory accounts of narrative comprehension. I noted that many instances of narrative comprehension involve readers assuming an equivalence between states of affairs in a fictional world and states of affairs in the text-worlds prompted by a narrator's act of narration. I also paid particular attention to the frequently-cited phenomenon of the empty text-world which is understood as a feature of homodiegetic narratives, and noted that this equivalence cannot be taken for granted. In my case study in Chapter 6, I revisited the phenomenon of the empty text-world, exploring how it could be applied to Atwood's *Surfacing* which provides an example of unreliable homodiegetic narration. I discussed a corpus of precis of the novel taken from the Goodreads website. Here I noted that in some instances readers appear to assume that the narrator's claims can be taken as reliable descriptions of states of affairs in the empty text-world from which the narrator narrates. I also noted that in other instances, readers appear to keep track of what they understand as discrepancies between these two ontologically distinct domains. Findings from my *Surfacing* study were reinforced by those from my *Blind Assassin* study, in which I also noted both behaviours occurring. My *Blind Assassin* study also provided examples of readers comparing information from a passage of homodiegetic narrative with a discrete passage of heterodiegetic narrative describing the same narrative events. Here, I provided evidence that some readers combined information from the narrator's testimony with information from the heterodiegetic narrative in an attempt to build a single unified representation of states of affairs in a world ontologically prior to the text-worlds prompted by the two distinct discourses. I also noted that not all participants demonstrated this behaviour.

In Chapter 8, I argued that there is a need for Text World Theory to acknowledge the representations that readers build of the most ontologically prior worlds projected by fictional texts. I suggested that readers build these representations by selectively mapping information from ontologically dependent text-worlds and modal-worlds. I also argued against the suggestion that building such representations can simply be regarded as the equivalent of ‘filling’ empty text-worlds. I suggested instead that such representations, which must evolve in the long-term memory over time, may be different in kind to the text-world mental representations that form moment-by-moment in the working memory. Here, I noted Gibbons’ (2023) proposal that Text World Theory should be augmented with the concept of ‘world-retrieval’ to account for ways in which readers recall their experiences of individual text-worlds at later points in an evolving discourse. Concurring with this proposal, I also suggested there was a need to account for a distinct process by which information taken to be true in the most ontologically prior world projected by a fictional text is recalled independently of the conceptual structure in which it is first experienced.

In Chapter 9, I offered an analysis of Atwood’s ‘Alphinland’ short story sequence, illustrating how such processes could account for my reading of a series of related heterodiegetic narratives, and suggesting that such experiences were hard to account for in Text World Theory terms without the amendments I have proposed.

In my studies of reader responses to *Surfacing* and *The Blind Assassin* in Chapters 6 and 7, I also provided examples of readers making inferences about events or states of affairs in a fictional world that are not described explicitly by a narrator. I argued that, while Text World Theory already accounts for some inferences that discourse participants make, there is a categorical difference between the inferences required to ‘fill the gaps’ in a currently conceptualised text-world prompted by a narrator’s account, and inferences about unnarrated events in the world from which the narrator speaks. I suggested that while the former may be made unconsciously, such latter inferences are frequently made consciously and tentatively, and that readers keep track of their degree of certainty or uncertainty about events in the most ontologically prior world projected by a fictional text.

10.1.2 - Text-Worlds and Storyworlds Revisited

As well as making a case that Text World Theory can be expanded to account for readers' evolving representations of the most ontologically prior worlds projected by a fictional text, I have also argued in this thesis that such representations might be accounted for using the existing storyworlds framework (Herman 2002, 2009; Ryan 2019, 2022; Ryan and Thon 2014).

In Chapter 3 I described how the storyworlds framework makes predictions about the mental representations that discourse participants create when they comprehend narratives. I noted Ryan's (2019, 2022) claims that texts which can be read as narratives can be regarded as invitations to create storyworlds in the imagination. I also discussed the distinction she drew between two short narrative candidates, and her arguments that of the two, only one can be regarded as storyworld-forming because it invites the reader to imagine more than the story represents (2019: 70). I argued that this suggestion offers a plausible way of aligning Text World Theory and storyworld accounts of narrative comprehension, with Text World Theory accounting for the mental representations that readers form in the working memory in response to explicit linguistic clues, and the storyworld framework describing the evolving representations of the most ontologically prior world projected by a fictional narrative, which also includes readers' assumptions and hypotheses about non-narrated events. In Chapter 8, I discussed a number of other ways in which two frameworks appear to offer complimentary accounts of the comprehension of linguistically encoded narratives.

I also made the suggestion that listeners' and readers' mental representations of storyworlds in the long-term memory may be different in kind to text-world mental representations in the working memory. For example, I suggested that findings from my *Blind Assassin* data supported Emmott's argument that readers create 'entity representations' in which they store information about characters or places independently of information about the scenes in which those characters or places were depicted. In doing so, I suggested that in some instances, storyworld mental representations may replace text-world by text-world information in the long-term memory, but that in other cases, the same information may be stored simultaneously in different forms.

10.1.3 - Text-World Consolidation Processes

If it is indeed the case that listeners and readers create discrete storyworld mental representations of fictional worlds during comprehension, then this raises the question of how such storyworld representations are created from the text-worlds that are formed in the moment-by-moment experience of discourse processing. In Chapter 3 of this thesis, I offered three specific hypotheses about how readers' text-world mental representations of narratives might be consolidated as they are remembered and later recalled. These were that readers do not always recall information in a narrative in the same conceptual structure it is presented in a text, that readers consolidate conceptual structures by reframing information in modal-worlds as factually correct in prior ontological worlds, and that readers add elements to text-world conceptual structures to represent inferred beliefs and desires of characters, or their own inferences about events in the fictional world. In Chapters 6 and 7, I refined these hypotheses in the light of the studies I presented. I am now in a position to reframe them in terms of my proposed additions to Text World Theory. These reframed hypotheses describe processes that would account for the formation of storyworld-like representations from the text-world representations predicted by Text World Theory. In my own reader-response studies, I have provided evidence of each type of behaviour occurring in particular circumstances. Nonetheless, I offer these proposed consolidation strategies not as a comprehensive account of the processes I claim can occur as text-worlds are remembered and recalled, but as hypotheses that can be further tested with additional studies.

These hypotheses come with two important caveats attached. Firstly, when I presented the findings of my studies in Chapters 6 and 7, I emphasised that my focus on assembling large corpora of reader responses allowed me to make a degree of quantitative judgement about the frequencies with which different consolidation processes were undertaken. I noted that, while many particular processes were adopted by significant percentages of readers in response to particular textual prompts, text-world consolidation during and after reading does not appear to a deterministic process that is performed identically by all readers. Instead, the hypotheses I present here describe

consolidation strategies that are available to discourse participants, with different discourse participants adopting different strategies with respect to different parts of a narrative prompt text on different occasions.

Secondly, the strategies I outline here describe processes that allow readers to present summaries and precis of narrative texts. I have argued that the ability of a reader to produce a summary with a different conceptual structure to the text that prompted it can be taken as evidence that mental representations with revised conceptual structures are present in the mind. However, this ability cannot be taken as evidence that a particular aspect of a conceptual structure originally prompted by a text has been forgotten. This caveat does not present a challenge to my proposed revised model, since I have argued that some readings and comprehension processes rely on readers being able to compare and contrast their original text-world and resulting storyworld representations. Indeed, this ability to store the same information in more than one format is compatible with the claim that readers often recall gist memories of texts alongside verbatim memories (Brainerd and Reyna 2005; Reyna and Brainerd 1995; Reyna and Kiernen 1994, and Section 2.3.2 of this thesis). Nonetheless, it is important to acknowledge this limitation in my study.

With these caveats noted, my revised hypotheses are as follows:

- **Revised Hypothesis 1: Incompleteness**

When comprehending and recalling long narratives, some elements of a text's original conceptual structure will be missing from a listener or reader's long-term memory.

Specifically this hypothesis suggests that, while different discourse participants may employ different strategies to consolidate different parts of a text, all participants will adopt some consolidation strategies during or after reading when processing long narratives. It should be noted that this hypothesis is not incompatible with the caveat noted above, that the absence of a particular aspect of a conceptual structure from a reader's summary is not evidence of the absence of that aspect from the long-term

memory. The hypothesis that some details of a text's original conceptual structure are necessarily forgotten is compatible with widely acknowledged claims that readers frequently do not remember texts word-for-word but instead recall meanings rather than details of precise linguistic structures (Bransford and Franks 1974; Elfenbein 2018: 100; Reyna and Brainerd 1995; Reyna and Kiernan 1994; Van den Broek and Gustafson 1999 and Section 2.3.2 of this thesis).

It is also worth noting that this hypothesis reveals a need to define the term 'long narrative' more precisely. For example, narratives which are ordinarily defined as 'short stories' from a literary critical perspective may still be long compared with typical conversational narratives. One way of refining this hypothesis further would be to explore whether there is some threshold beyond which typical readers and listeners are not able to remember conceptual structures exactly.

This hypothesis is relevant to the storage and recall of fictional narratives, but may also be a feature of the storage and recall of other kinds of discourse.

- **Revised Hypothesis 2: Building Consolidated Storyworlds**

One common way in which listeners and readers consolidate the text-world conceptual structures of fictional narratives is by mapping information presented in linguistically prompted modal-worlds to create an evolving representation of states of affairs in a single storyworld, which has the same ontological status as the most ontologically prior text-world prompted by the text.

This hypothesis suggests that the storyworld representations that a discourse participant builds and updates in the long-term memory are potentially discrete from their memories of experiencing individual text-worlds. Some discourse participants may recall particular aspects of the text-world-by-text-world conceptual structure of a text

alongside their consolidated storyworld representation, but this need not happen on every occasion.

This hypothesis is particular to the comprehension and recall of fictional narratives. However, if this hypothesis is correct then this would be likely to involve similar cognitive processes to those employed when discourse participants build and maintain representations of states of affairs in the real world. For example, as a person who has never visited Canada, I have nonetheless built up a substantial amount of knowledge about the country. I am aware that some of this information has come directly from my experiences of reading Atwood's fiction, and am also aware that some of the inferences I've made about Canada while reading Atwood's fiction may not be correct. At the same time, I have a wider set of beliefs about Canada which I cannot recall learning from a particular source, even though some of these may also have come from reading Atwood's work. I suggest that this apparent parallel between my proposed model of storyworld knowledge and patterns of real-world knowledge acquisition is an argument in favour of my model.

- **Revised Hypothesis 3: Optimisation, Float and Ontological Simplification**

Discourse participants frequently consolidate text-world conceptual structures by mapping world-building elements and function-advancing propositions from parent to child text-worlds, or from child to parent text-worlds, unless this process results in contradictions with other information provided in the text, or with prior knowledge. This occurs through processes I term 'optimisation' and 'float' (described in Sections 2.2.4 and 8.1 of this thesis), which parallel the process described by Fauconnier in his mental spaces model (1985, 1997).

This hypothesis suggests that the principle of minimal departure (Ryan 1991: 48-60; Gavins 2007: 12 and Section 3.3.2 of this thesis), which is usually deployed to describe

the incrementation of discourse-world knowledge into an evolving text-world representation, may be a specific instance of a more general process by which participants map text-world structure between worlds at different ontological levels, unless there is an explicit reason to override this default behaviour. I provided examples of this in Chapter 7 when I discussed how my *Blind Assassin* survey participants presented beliefs of non-narrating characters as if they were facts about the fictional world of novel.

In this thesis, I have used the term ‘ontological simplification’ to describe the process by which readers map information from modal-worlds into worlds at prior ontological levels: a process which involves an assumption that certain elements of modal-worlds attributed to particular characters can be regarded as accurate descriptions of prior ontological worlds.

This hypothesis is relevant to the storage and recall of fictional narratives, but may also be a feature of the storage and recall of other kinds of discourse. The hypothesis accounts for the fact that much information that a reader comes to accept as true about a fictional world is inferred via speech or thought acts attributed to non-narrating characters. This parallels the fact that much real-world knowledge is learned not from first-hand experience from the testimonies of other people.

- **Revised Hypothesis 4: Modal generalising**

When consolidating text-world conceptual structures, there is a tendency for listeners and readers to attribute modal-worlds initially associated with individual characters to wider groups, or to universally held beliefs.

This hypothesis reflects behaviours I noted in both of the studies I reported in this thesis. In Section 6.2.3.4 I drew parallels between my own observations of this phenomenon and observations made by other analysts. Further research would be useful to explore

with this is a common or universal tendency, or whether particular conditions make such readings more likely. For example, it may be a more common consolidation strategy when texts are read as allegories (Wales 2014: 14), and assumed to encode knowledge or wisdom that is universally applicable.

This hypothesis is relevant to the storage and recall of fictional narratives, but may also be a feature of the storage and recall of other kinds of discourse.

- **Revised Hypothesis 5: Application of Schema Knowledge**

Readers and listeners draw on existing background knowledge to consolidate multiple function-advancing propositions, originally conceptualised in multiple text-worlds, into single function-advancing propositions in a single text-world or modal-world.

This hypothesis describes two distinct but related processes. Firstly, function-advancing propositions in text-worlds separated by world-switches may be combined and re-construed as higher-order processes in a single text-world. I provided an example of this in Chapter 6 when I described a reviewer summarising several discrete actions under the single function-advancing proposition ‘doing standard camping-trip activities’.

Alternatively, function-advancing propositions in mutually contradictory text-worlds may be grouped together and conceptualised as a single encompassing proposition in a single world. I provided an example of this in Chapter 7, when I described survey respondents replicating Dancygier’s (2007) consolidation of multiple possible causes of Laura’s car crash into a single text-world describing an accidental death.

This hypothesis may reflect a feature of the storage and recall of discourses of all kinds. However, it might be particularly significant during the comprehension of fictional narratives, as readers apply genre (schematic) knowledge to interpret a text, or make narrative interrelations (Mason 2019) between two different narratives.

- **Revised Hypothesis 6: Narrative Re-ordering and Point of View**

Readers and listeners may summarise narratives using language that creates novel text-world conceptual structures conveying alternative conceptions of temporal order which reflect different points of view.

In my case studies in Chapter 6 and 7 I presented examples of reviewers retelling a homodiegetic narrative comprising episodes of analepsis to create a heterodiegetic summary which presented events in their correct chronological order. I also presented examples of experimental respondents re-ordering a homodiegetic narrative told in its correct chronological order to create a heterodiegetic summary which reflected the order in which the narrator became aware of events. I argued that the ability of readers to distinguish the order in which events occurred from the order in which they were narrated or experienced is evidence that the same events are stored in multiple formats in the mind. I also argued that the order in which events are narrated can be a key marker of point of view in fictional narratives.

If one accepts structuralist accounts that define narrative in terms of its ability to encode events unfolding in time, then this hypothesis is clearly one which has particular relevance to narrative texts.

- **Revised Hypothesis 7: Incorporation of Inferences into Storyworld Representations**

When readers and listeners build long-term mental representations of fictional narratives, they may incorporate inferences about non-narrated states of affairs into their storyworld representation. Such inferences may be made consciously, and may be remembered as inferences rather than as uncontested facts about the storyworld.

In this thesis, I have argued that the inferences that readers make about unnarrated events in the storyworld are different in kind to the inferences they make when 'filling

gaps' in a single text-world representation. I have argued that this feature of my combined text-world and storyworld model reflects the way that readers build mental representations of the real world, in which people believe some facts, are unsure of the status of other facts, and understand there are further potentially knowable facts of which they have no knowledge. However, the tendency of readers to imagine unnarrated events in a fictional storyworld is one that is particular to the comprehension of narrative fiction. Indeed, as I have argued above, it is this feature of narrative comprehension that Ryan has argued is a necessary condition for the existence of storyworld mental representations.

Each of these hypotheses would benefit from further testing and refinement. I offer suggestions for how this might be done in the following section.

10.2 - Suggestions for Further Work

In this final section of Chapter 10, I offer suggestions for further work to test and build upon the hypotheses I have presented above. In this thesis I have attempted to demonstrate how rigorous stylistic analyses of readers' summaries of fictional texts can provide clues about mental representations of narratives in the long-term memory. However, it remains the case that such techniques cannot provide direct access to mental constructs. It is therefore unlikely that the hypotheses I have presented here can be validated or falsified in individual studies. Instead, a range of approaches using a range of empirical methodologies will allow analysts to build upon this model or offer alternatives. For this reason, the suggestions for further study I discuss here are not presented as a definitive list of tests needed to confirm or refute the hypotheses I have presented. Instead, I offer a range of suggestions for further work that I believe is likely to be particularly productive, or to advance the project I have begun here in novel ways.

10.2.1 - Replication of this Study: Exploring Additional Novel Precis in Online Reviews

Published stylistic studies frequently seek to test new hypotheses, develop new theoretical frameworks, or apply familiar analytical techniques to new kinds of texts. However, there is also value in repeating studies and attempting to validate or challenge existing findings. One way to test or refute the hypotheses I have offered here would be to repeat the studies I have presented with different texts or reader responses, and to determine the extent to which the findings coincide with or contradict my own.

In my study of Goodreads reviews, which I introduced in Chapter 5, I described a methodology for assembling a collection of 100 reviews that could be repeated for different novels to provide comparable corpora. In my study of *Surfacing* reviews which I presented in Chapter 6, I then described how I inspected my *Surfacing* corpus and selected a sub-corpus of 50 precis of the novel, arguing that, while this exercise was not entirely free from subjective judgement, the precis I found could largely be identified using a short list of objective criteria. This would allow the exercise to be replicated by another analyst, using a corpus of reviews of the same novel taken from a different source, or a corpus of Goodreads reviews of a similar novel. When I attempted to identify similar sub-corpora for other Atwood novels, however, the task was harder than for my *Surfacing* corpus. Fewer reviewers attempted to summarise *The Blind Assassin* and *Cat's Eye* as reviewers did for *Surfacing*, and those that did so were more likely to provide summaries that blended text-world and discourse-world observations. This in itself may be a significant finding. Reviewers of *The Blind Assassin* and *Cat's Eye* provided hints as to why this might be the case:

- It's so hard to express what exactly this book is about - any synopsis you read doesn't do it justice and explains nothing. (GRTBA-2)
- there is hardly any plot or resolution at all. The book just keeps meandering down memory lane and then stops. (GRCE-43)

- ...this is less a plot-driven novel reveling in world-building, and more of a parade of just absolutely extraordinary craft. (Review of *Cat's Eye* from outside my corpus of 100 reviews)

These comments imply that the style or narrative structure of these particular texts makes it harder to consolidate the resulting text-world-by-text-world mental representations into a series of discrete events that can be summarised. Undertaking a systematic review of responses to different novels on the Goodreads site, and studying the distributions of distinct precis among reviews of different authors or works belonging to different genres, may be revealing.

Where the assembled corpora for particular novels do contain significant numbers of discrete precis, it would be useful to determine the extent to which the findings I have presented here are replicated. In particular, a comparison of homodiegetic and heterodiegetic narratives to determine the extent to which a narrator's point of view affects readers' propensity to present summaries in different orders (as described in Revised Hypothesis 6) may be useful.

Another distinctive feature of the *Surfacing* precis was the high degree of similarity between precis offered by different readers. For example, I noted that almost half the precis in the sub-corpus opened with a sentence that began with a noun phrase identifying the narrator and placing her in the subject position. It might be useful to determine whether this pattern was replicated in other texts and text types. One interesting point of comparison might be a novel such as Annie Proulx's *Barkskins* (2016), which recounts the fortunes of two families of woodcutters over many generations. An initial study of reviews suggest that some participants begin their reviews by describing the actions of the first generation of characters, but that others frame the story with trees or forests as the primary subjects. A systematic comparison of this and similar texts might be productive.

10.2.2 - Replication of this Study: Summaries of Short Textual Extracts

In Chapter 7 of this thesis I presented the results of a study in which I asked participants to summarise a short extract or extracts from *The Blind Assassin*. The prompt texts were chosen because of the novel's complex discourse structure, and because the narrator's testimony presented contradictory accounts of states of affairs in the storyworld of the text. Repeating the study with different textual examples would be productive.

One drawback of the prompts chosen for this study was that they did not represent a complete narrative. Questionnaire-based studies of this kind are only possible with relatively short textual extracts. However, repeating the experiment with a complete short story of a similar length would be useful. In particular, it would be useful to determine whether respondents adopted similar strategies when summarising complete narratives, or whether they were more likely to draw on top-down interpretive structures such as genre schemas which may have been harder to apply to an incomplete text.

Another way in which this methodology could be built upon is by varying the experimental conditions under which participants were asked to write their summaries. In the study I presented in Chapter 7, respondents were asked to read the prompt text and then summarise it immediately afterwards. Increasing the length of time between reading and summary writing may lead to participants recalling fewer details, or employing consolidation strategies differently. This could be achieved online by dividing survey participants into different groups and giving subsets of participants unrelated tasks of different lengths to complete between reading and summary writing, or could be done in more controlled conditions in a laboratory setting.

10.2.3 - Summaries of Constructed or Adapted Narratives

My analysis in Chapter 7 of this thesis drew upon reader summaries of a naturally occurring text. While my two groups of participants were presented with different subsets of the text, all participants who took part saw identical versions of the prompts they were presented with. However, one way to

explore reader responses to particular linguistic features is to present different experimental groups with different versions of a text in which key elements have been adapted.

My analyses in Chapter 7 provided hints that particular linguistic features may lead to particular consolidation strategies. For example, I suggested that there may be a limit to the number of mutually embedded modal-worlds that readers are easily able to conceptualise, and that this may have resulted in evidence of ontological simplification in respondent summaries. Constructing or adapting experimental prompts which describe similar storyworld states of affairs but contain different levels of recursive embedding, and studying how groups of readers summarise these texts, would allow this particular consolidation strategy to be explored in more detail.

10.2.4 - Priming effects and the Application of Genre Knowledge

Discussing reader precis of *Surfacing* in Chapter 6, I suggested that readers' schematic knowledge of particular text types might affect their long-term representations of narratives, causing them to pay attention to some events more than others and to foreground particular events in their summaries.

This could be tested by asking different participant groups to summarise the same story, but priming each to read the text differently. For example, if one group of participants was informed before reading that the text was taken from a detective novel, and others were informed that it was from a romance, this might result in different world-building elements or function-advancing propositions being recalled more frequently, or in respondents offering summaries with different conceptual structures.

10.2.5 - Summaries of Individual Text-Worlds

In Section 8.3, I paid brief attention to the ways in which different respondents to my *Blind Assassin* survey offered different summaries of the most detailed text-world prompted by my source text. Here I suggested that certain world-building elements and function-advancing propositions were more likely to be recalled than others. A more systemic study of the recall of individual text-worlds is likely

to be productive. For example, it would be possible to test the hypothesis that human or animate world-building elements were more likely to be listed in summaries than non-animate elements. A study of this kind could also explore the effect of particular lexeme choices and the foregrounding effects of rare or semantically deviant language.

Such a study could also be productive for another reason. In Section 2.1 of this thesis I noted debates about the existence of analog and analytic mental representations. It is frequently claimed that text-worlds are mental representations. However, little systematic attention has yet been paid to the nature of such representations, and in particular, to how individual text-worlds might be comprised of different analog and analytic elements, or of combinations of mental images in more than one modality. In my analysis of 'Alphinland' in Chapter 9, I suggested that my moment-by-moment reading of the text prompted mental images in visual, aural and emotional modalities, but that not all these elements were present when I later recalled the text. A systematic study of such experiences would enable tests of the claim that text-world and storyworld mental representations may be different in kind.

10.2.6 - Text-World Consolidation and Non-Narrative Discourse Types

In outlining my revised hypotheses, I suggested that some consolidation strategies I have explored may be particular to the recall of narratives and that some may be a feature of discourse comprehension more generally. Exploring the conceptual structures of readers' summaries of non-narrative discourse types, and comparing these to the summaries of narrative fictions, would be productive. In particular, it would be useful to explore the storyworld-forming potential of texts such as a lyric poems which may invite readers or listeners to imagine states of affairs in fictional worlds but which are not traditionally regarded as narrative in nature.

Literary narratives tend to be longer than most discourse types. In outlining my Revised Hypothesis 1 above, I suggested it would be productive to explore in more detail whether there was some threshold beyond which it became harder for readers to recall narratives in the same conceptual

structure as that prompted by the source text. A systematic study of the effect of narrative length on readers' tendency to employ particular consolidation strategies would also be productive.

10.3 - In Conclusion

It is frequently claimed (see, for example, Bruner 1986, 1991; Herman 2003) that narrative is a fundamental cognitive tool which humans use to make sense of the world. In this thesis I have drawn on Text World Theory - a cognitive linguistic account of discourse comprehension - to explore how the mental representations of narratives that readers create in the moment of discourse comprehension are consolidated as they are stored in and recalled from the long-term memory. In doing so, I have also suggested that Text World Theory might be expanded by drawing on elements of the storyworld framework to account for speakers' and readers' long-term mental representations of narratives.

To my knowledge, this study represents the first thesis-length attempt to explore, from a Text World Theory perspective, what happens to listeners' and readers' mental representations of fictional narratives after the moment of initial comprehension. For this reason the studies I present here, and the revised hypotheses I offer as a result, represent only small steps in what I hope will ultimately be a much larger endeavour.

Appendix A - Extracts of *The Blind Assassin* Discussed in this Thesis

In Chapter 7, I presented a text-world analysis of two passages from Atwood's *The Blind Assassin*.

These passages were also presented to participants in the survey I reported in this chapter. The two extracts are replicated here in their entirety.

Extract 1

The Bridge

Ten days after the war ended, my sister Laura drove a car off a bridge. The bridge was being repaired: she went right through the Danger sign. The car fell a hundred feet into the ravine, smashing through the treetops feathery with new leaves, then burst into flames and rolled down into the shallow creek at the bottom. Chunks of the bridge fell on top of it. Nothing much was left of her but charred smithereens.

I was informed of the accident by a policeman: the car was mine, and they'd traced the licence. His tone was respectful: no doubt he recognized Richard's name. He said the tires may have caught on a streetcar track or the brakes may have failed, but he also felt bound to inform me that two witnesses - a retired lawyer and a bank teller, dependable people - had claimed to have seen the whole thing. They'd said Laura had turned the car sharply and deliberately, and had plunged off the bridge with no more fuss than stepping off a curb. They'd noticed her hands on the wheel because of the white gloves she'd been wearing.

It wasn't the brakes, I thought. She had her reasons. Not that they were ever the same as anybody else's reasons. She was completely ruthless in that way.

"I suppose you want someone to identify her," I said. "I'll come down as soon as I can." I could hear the calmness of my own voice, as if from a distance. In reality, I could barely get the words out; my mouth was numb, my entire face was rigid with pain. I felt as if I'd been to the dentist. I was furious with Laura for what she'd done, but also with the policeman for implying that she'd done it. A hot wind was blowing around my head, the strands of my hair lifting and swirling in it, like ink spilled in water.

"I'm afraid there will be an inquest, Mrs Griffen," he said.

"Naturally," I said. "But it was an accident. My sister was never a good driver."

I could picture the smooth oval of Laura's face, her neatly pinned chignon, the dress she would have been wearing: a shirtwaist with a small rounded collar, in a sober colour - navy blue or steel grey or hospital-corridor green. Penitential colours - less like something she'd chosen to put on than like something she'd been locked up in. Her solemn half-smile; the amazed lift of her eyebrows, as if she were admiring the view.

The white gloves: a Pontius Pilate gesture. She was washing her hands of me. Of all of us.

Extract 2

The Toronto Star, May 26, 1945

**QUESTIONS RAISED IN CITY DEATH
SPECIAL TO THE STAR**

A coroner's inquest has returned a verdict of accidental death in last week's St. Clair Ave. fatality. Miss Laura Chase, 25, was travelling west on the afternoon of May 18 when her car swerved through the barriers protecting a repair site on the bridge and crashed into the ravine below, catching fire. Miss Chase was killed instantly. Her sister, Mrs Richard E. Griffen, wife of the prominent manufacturer, gave evidence that Miss Chase suffered from severe headaches affecting her vision. In reply to questioning, she denied any possibility of intoxication as Miss Chase did not drink.

It was the police view that a tyre caught in an exposed streetcar track was a contributing factor. Questions were raised as to the adequacy of safety precautions taken by the City, but after expert testimony by City engineer Gordon Perkins these were dismissed.

The accident has occasioned renewed protests over the state of the streetcar tracks on this stretch of roadway. Mr. Herb T. Jolliffe, representing local ratepayers, told Star reporters that this was not the first mishap caused by neglected tracks. City Council should take note.

Appendix B - The Blind Assassin Questionnaire Design

The following questionnaire was distributed to participants in my *The Blind Assassin* study, which I report in Chapter 7.

1. About you

1.1. What is your gender? (Female / Male / Prefer not to say / Prefer to self-describe)

1.2. What is your highest qualification in English literature? (No qualification / GCSE or Scottish Standard Grade / A-level or Scottish Highers / Undergraduate / Masters / PhD)

1.3. What is your first language? (English / a language other than English)

1.4. How many novels do you read in a typical year (select from range)? (0 / 1-2 / 3-5 / 6-10 / 11-20 / 21 or more)

2. Please read the following text? (Participants are presented with extract 1 or extracts 1 + 2: for full extracts see Appendix A)

2.1. Do you recognise the text? (Do you believe you have read the novel from which it was taken?) (Yes / No)

3. A summary of the text

3.1. Please provide, in your own words, a summary of what you have read. (Free text)

4. 4.1. Please indicate which of the following emotions the text evoked for you (Anger / Disgust / Fear / Anxiety / Sadness / Desire / Relaxation / Happiness / Boredom / Grief / Curiosity / Amusement / Excitement / Arousal / Nostalgia / A different emotion (you can specify this below) / This extract did not trigger any emotions for me)

5. About the extract you read:

5.1 - To what extent do you agree or disagree with the following statements (5-point Likert scale – ‘Strongly agree’ to ‘Strongly disagree’)

- a. I have a clear understanding what took place in the passage(s) I read
- b. The narrator provided an accurate testimony of events
- c. The narrator was trustworthy
- d. The narrator was someone I could identify with
- e. The narrator was someone I found it easy to have sympathy for
- f. The narrator was like me
- g. I found it easy to see things from the narrator’s perspective

5.2 – Please indicate how confident you are that the following events occurred in the passage you read (7-point scale – not at all confident to completely confident)

1. The car that Laura was driving fell into a ravine
2. Laura's death was an accident
3. Laura was alone in the car when she died
4. The policeman was not previously known to the narrator
5. The tires on the car which Laura was driving were due to be replaced
6. The policeman traced the narrator's licence
7. Laura deliberately steered her car off a bridge
8. Laura had a history of speeding
9. Two people witnessed Laura's death

6. About your reading style

5.1 How much do you agree or disagree with the following statements? (5-point Likert – 'Strongly agree' to 'Strongly disagree')

1. I like to see tension building up in the plot of a story
2. Sometimes I feel like I've almost "become" a character I've read about in fiction
3. The type of literature I like best tells an interesting story
4. I sometimes have imaginary dialogues with people in fiction
5. The most important part of fiction or drama is the plot
6. When I read fiction I often think about myself as one of the people in the story
7. When reading a novel, what I want most is to know how the story turns out
8. Sometimes I wonder whether I have really experienced something or whether I have read about it in a book
9. I like it best when a story has an unexpected ending
10. I actively try to project myself into the role of fictional characters, almost as if I was preparing to act in a play
11. When reading a novel my main interest is seeing what happens to the characters
12. Sometimes characters in novels almost become like real people in my life
13. I find it difficult to read a novel in which nothing much seems to happen
14. After reading a novel or story that I enjoyed, I continue to wonder about the characters almost as though they were real people

The questions in section in 5 are taken from Miall and Kuiken's 'Aspects of Literary Response' Questionnaire (Miall and Kuiken 1995)

Appendix C - *The Blind Assassin* Extracts: Text-World Mark-up

The following table encodes a text-world analysis of the two source-text extracts presented in Appendix A. Each text-world is given a unique numerical identifier, and these are used in my analysis in Chapter 7.

0	(Empty text world from which narrator narrates)
1-A TW	Ten days after the war ended, my sister Laura drove a car off a bridge. The bridge was being repaired: she went right through the Danger sign. The car fell a hundred feet into the ravine, smashing through the treetops feathery with new leaves, then burst into flames and rolled down into the shallow creek at the bottom. Chunks of the bridge fell on top of it.
2-A-NEG WS	Nothing much was left of her but charred smithereens.
3-A WS	I was informed of the accident by a policeman: the car was mine, [...] His tone was respectful: [...]
4-A WS	they'd traced the licence.
5-B Epis	(no doubt) he recognized Richard's name
6-B Speech	(He said)
7-C Epis	(may) the tires (may) have caught on a streetcar track or
8-C Epis	(may) or the brakes (may) have failed
9-B Deo	(he also felt bound)
10-C (Speech)	(to inform me that) Two witnesses - a retired lawyer and a bank teller, dependable people
11-D Speech	(had claimed)
12-E Epis	(To have seen) The whole thing
13-D Speech	(They'd said) Laura had turned the car sharply and deliberately, and had plunged off the bridge with no more fuss
14-D-Blend	(Blend) than stepping off a curb
15-D Epis	(They'd noticed) her hands on the wheel because of the white gloves she'd been wearing.
16-B-Neg Epis	(I thought) It wasn't the brakes
17-A	She had her reasons

WS	[...] She was completely ruthless in that way
18-A-Neg	Not that they were ever the same as anybody else's reasons.
24-B-EPS	(I said)
19-C Epis	(I suppose)
20-D Boul	(you want) Someone to identify her
21-D Boul	(future tense = intention) I'll come down as soon as I can
22-B Epis	(I could hear) The calmness of my own voice
23-B-Blend	as if from a distance
24-B Deo	(In reality I could barely) Get the words out
RETURN TO 3	my mouth was numb, my entire face was rigid with pain. I was furious with Laura for [ref to world 1] but also with the policeman for...
26-A-Blend	(I felt as if) I'd been to the dentist
RETURN TO 3	I was furious with Laura for doing what she'd done but also with the policeman for...
27-B – WS	Doing what she'd done
28-B - Epis	(policeman for implying) She'd done it
RETURN TO 3	A hot wind was blowing around my head, the strands of my hair lifting and swirling in it,
29-A-Blend	Like ink spilled in water
30-B Speech	(he said)
31-C Boul	(I'm afraid) There will be an inquest
Return to 3	'Naturally', I said
32-B Speech	(I said) It was an accident
33-B-NEG	My sister was never a good driver
34-B Deo	(I could)
35-C Epis	(picture) the smooth oval of Laura's face, her neatly pinned chignon, the dress she would have been wearing: a shirtwaist with a small rounded collar, in a sober colour – navy blue [...] penitential colours [...] the amazed lift of her eyebrows,
36-C Epis	(picture) Or steel grey
37-C Epis	(I could picture) Or hospital green

38-C-NEG	(less like) Something she'd chosen to put on
39-C-Blend	(...than like) something she'd been locked up in.
40-C-Blend	as if she were admiring the view
41-WS+ Blend	The white gloves: a Pontius pilate gesture
42-WS+ Blend	She was washing her hands of me; of all of us

Newspaper article

50	The Toronto Star, May 26, 1945 QUESTIONS RAISED IN CITY DEATH SPECIAL TO THE STAR A coroner's inquest has returned a verdict of accidental death in
51-WS	last week's St. Clair Ave. fatality. Miss Laura Chase, 25, was travelling west on the afternoon of May 18 when her car swerved through the barriers protecting a repair site on the bridge and crashed into the ravine below, catching fire. Miss Chase was killed instantly.
Return to 50	Her sister, Mrs Richard E. Griffen, wife of the prominent manufacturer, gave evidence that
51 – Epis	Miss Chase suffered from severe headaches affecting her vision.
Return to 50	In reply to questioning,
52 – NEG	she denied any possibility of intoxication
53 – NEG	as Miss Chase did not drink.
Return to 50	It was the police view that
54 – EPIS	(It was the police view that) a tyre caught in an exposed streetcar track was a contributing factor.
Return to 50	Questions were raised as to the adequacy of safety precautions taken by the City, but after expert testimony by City engineer Gordon Perkins these were dismissed.
55 WS	The accident has occasioned renewed protests over the state of the streetcar tracks on this stretch of roadway. Mr. Herb T. Jolliffe, representing local ratepayers, told <i>Star</i> reporters
56 – WS / NEG	that this was not the first mishap caused by neglected tracks.
57 – Deo	City Council should take note.

Appendix D: Further Examples from my *The Blind Assassin* study

Examples of Text-World Consolidation from my *The Blind Assassin* Survey

In this appendix, I offer further examples from my survey data to demonstrate the consolidation strategies discussed in Sections 7.4 and 7.5. The examples given here do not represent a definitive list, but are offered as further evidence that the specific instances I discuss in the body of the thesis are indicative of patterns that were observed more widely in the data. As is the case elsewhere in this thesis, typos and errors in respondent comments are replicated without [sic] markers for ease of reading.

Removal of Modality (Ontological Simplification)

Example 1: Prompt text

I could hear the calmness of my own voice

Group 1 Respondents

The following respondent recreated the epistemic modal-world prompted by 'I could hear'

- *She could hear that her voice was calm (Respondent 1-33)*

The following respondents described the narrator's calmness as a fact at the initial text-world level.

- *The narrator is matter of fact (Respondent 1-2)*
- *The writer was calm and composed when dealing with the police (Respondent 1-3)*
- *the narrator also seems quite restrained (Respondent 1-12)*
- *The narrator is outwardly calm (Respondent-1-27)*
- *The protagonist projects calmness' (Respondent 1-30)*
- *The narrator is calm (Respondent 1-45)*
- *the protagonist agrees and is angry with her whilst appearing calm to police (Respondent 1-56)*
- *her voice is calm even though she feels the opposite (Respondent 1-75)*
- *The writer seems to be unnaturally calm and self possessed (Respondent 1-88)*

Group 2 Respondents

The following respondents recreated the epistemic modal-world prompted by 'I could hear'

- *she sounded calm (Respondent 2-7)*
- *The sister offers to identify the body aware that she sounds calm and practical (Respondent 2-31)*

The following respondents described the narrator's calmness as a fact at the matrix text-world level.

- *Narrator [...] spoke calmly (Respondent 2-3)*
- *She then remains stoic (Respondent 2-6)*
- *Her sister is [...] calm on the outside (Participant 2-55)*
- *She deals with it calmly (Respondent 2-56)*
- *The sister remains calm (Respondent 2-61)*

Example 2: Prompt text

His tone was respectful: no doubt he recognized Richard's name.

Group 1 Respondents

The following respondents recreated an (unnegated) epistemic modal-world in response to 'no doubt he recognized Richard's name':

- *The policeman was polite and considerate 'probably because he recognised Richard's name (Respondent 1-43)*
- *A woman is being told by a police man, who may have heard of her husband Richard (Respondent 1-89)*

The following respondents reported Richard's existence as a fact at the initial text-world level:

- *'Sister, married to well-known Richard [...] (Respondent 1-4)*
- *The woman is married to a person called Richard who is of some note. (Respondent 1-74)*
- *A woman (who is well known via her husband) (Respondent 1-18)*
- *There was reference to Richard (Respondent 1-33)*

Group 2 Respondents

The following respondent recreated an (unnegated) epistemic modal-world in response to ‘no doubt he recognised Richard’s name’:

- *The narrator (who is married to a well-known manufacturer and thinks the policeman has recognised her name) (Respondent 2-44)*

The following respondents reported Richard’s existence as a fact at the initial text-world level:

- *There is another character called Richard (Respondent 2-12)*
- *The sister’s husband is well-known*

Example 3: Prompt text

“I’m afraid there will be an inquest, Mrs Griffen,” he said.

Group 1 Respondents

No respondents recreated the hedge prompted by ‘I’m afraid’. The following respondents recreated the world-switch prompted by the instance of direct speech.

- *the police say there will be an inquest (Respondent 1-28)*
- *The policeman said, and she acknowledged that there would be an inquest. (Respondent 1-33)*
- *Despite this, when the policeman told him there would be an inquest [... (Respondent 1-35)*
- *The policeman explained that there would be an inquest (Respondent 1-39)*
- *The police tell them they’ll be an inquest (Respondent 1-45)*
- *They are informed there will be an inquest (Respondent 1-58)*
- *The sister is told there will be an inquest (Respondent 1-80)*

The following respondents presented the existence of the inquest as a fact at the initial text-world level:

- *‘An inquest will be held (Respondent 1-4)*
- *There will be an inquest (Respondent 1-22)*
- *The Police will be conducting an investigation’ (Respondent 1-61)*
- *[The narrator]is noticeably weary at the prospect of having to go through with the rigmarole of official identification and inquest (Respondent 1-47)*
- *There will be an inquest (Respondent 1-72)*
- *There will be an inquest (Respondent 1-74)*

Group 2 Respondents

No respondents recreated the hedge prompted by 'I'm afraid'. The following respondents recreated the world-switch prompted by the instance of direct speech. Two added an element of deontic modality to their summaries which was not present in the original text, suggesting they conceptualised the inquest as something that was necessary.

- *He said there would be an inquest (Respondent 2-19)*
- *The Respondent says there will need to be an inquest (Respondent 2-31)*
- *She resents the police officer... for saying an inquest will be necessary (Respondent 2-51).*

The following respondent presented the existence of the inquest as a fact at the initial text-world level:

- *There is an investigation under way (Respondent 2-5)*

Removal of Modality (Simplifying Chains of Embedded Worlds)

Prompt text

...but he [the policeman] also felt bound to inform me that two witnesses - a retired lawyer and a bank teller, dependable people - had claimed to have seen the whole thing. They'd said Laura had turned the car sharply and deliberately, and had plunged off the bridge with no more fuss than stepping off a curb. They'd noticed her hands on the wheel because of the white gloves she'd been wearing.

Group 1 Respondents

The following respondents reported the policeman's testimony and the eyewitnesses as mutually-embedded beliefs:

- *The police visited to inform the writer of the accident, explaining that there had been two reliable witnesses to the incident. They claim Laura had taken a sharp turn of the wheel, as simple as stepping off a curb. (Respondent 1-3)*

- *The policeman briefly suggested [...] suicide, referring to 2 reliable witnesses who stated that they had seen the driver deliberately turn the steering wheel (her hands were in distinctive white gloves) (Respondent 1-5)*
- *The police officer suggests that it could have been an accident, though he also then explains quite explicitly that two witnesses saw the accident happen and that the witnesses said that it was deliberate. (Respondent 1-10)*
- *The officer also suggested that, according to two witnesses, it may have been intentional as the witnesses thought she have turned the steering wheel into the railing. (Respondent 1-76)*

The following respondents stated Laura's suicide as a fact, with no epistemic modality:

- *A car was driven off a bridge by someone who knew what they were doing. (Respondent 1-19)*
- *Two bank employees witnessed her gloved hands on the wheel making no attempt to sterr away from the danger (Respondent 1-4)*
- *The main characters sister deliberately drove into a ravine. She was using the main characters car. There were 2 reputable witnesses to this. (Respondent 1-61)*

The following respondents reported only the policeman's beliefs:

- *the policeman implies her sister may have committed suicide, due to the way she drove off the bridge. (Respondent 1-8)*
- *A policeman has come to tell the narrator that he sister has deliberately driven off a bridge and is dead. (Respondent 1-53)*
- *The officer presumes the accident was a suicide (Respondent 1-69)*
- *The police speak to her sister and seem to suggest it was intentional (Respondent 1-71)*

The following respondents reported only the eyewitnesses beliefs:

- *two witnesses claim that Laura (the sister) drove off the bridge intentionally (Respondent 1-14)*
- *in what witnesses claim and the narrator accepts was a deliberate suicide. (Respondent 1-16)*

- *two reliable witnesses say it was deliberately driven off the bridge. They saw the white gloved hands on the steering wheel (Respondent 1-22)*
- *The accident was witnessed by two individuals who are professionals and who, it sounds, are being treated as reliable witnesses. They say that it appeared that her sister drove the car off the bridge deliberately. (Respondent 1-27)*
- *Witnesses have stated that the act appeared deliberate, they could see her sister's hands on the wheel of the car as she was wearing white gloves. (Respondent 1-29)*

Group 2 Respondents

The following respondents reported the policeman's testimony and the eyewitnesses as mutually-embedded beliefs. (We note that here, unlike in group one, one respondent replicated the deontic modal-world triggered by the hedge 'he felt bound'):

- *The policeman came and told her about it. That there were 2 witnesses (a banker and... a lawyer?) who both saw Laura turn the wheel suddenly to head off the bridge (they remembered her white gloves). (Respondent 2-`19)*
- *Police had to say 2 witnesses reckoned it was deliberate (Respondent 1-21)*
- *The policeman who tells her, makes it clear that witnesses believe intentional, because turned wheel. (Respondent 2-25)*
- *The police told her that Laura had been seen by two witnesses as wearing white gloves during the accident and having sharply turned her car in order to crash it. (Respondent 2-28)*
- *The policeman [...] says two witnesses suggest Laura deliberately veered off the bridge. (Respondent 2-31)*

The following respondents stated Laura's suicide as a fact, with no epistemic modality.

- *The writer's sister killed herself by driving off a bridge. (Respondent 2-10)*

- *A car is driven off a bridge, deliberately we are given to understand (Respondent 2-13)*

The following Respondents reported only the policeman's beliefs:

- *Police imply her sister may have taken her own life (Respondent 2-56)*

The following respondents reported only the eyewitnesses beliefs:

- *Witnesses suggest that Laura died by her own hand. (Respondent 2-51)*
- *two witnesses saw her turning her wheel intentionally since she was wearing white gloves (Respondent 2-54)*
- *Two eye witnesses claimed that she had intentionally driven off the bridge into the ravine, (Respondent 2-68)*
- *According to two witnesses (a lawyer and a bank teller) the sister drove deliberately off the bridge. (Respondent 2-69)*

Consolidation of Worlds at the Same Ontological Level Using Schema Knowledge

Prompt text

He [the policeman] said the tires may have caught on a streetcar track or the brakes may have failed

Group 1 Respondents

The following respondents replicated two discrete epistemic modal-worlds to represent the two possible explanations given for Laura's accidental death.

- *The policeman briefly suggested a couple of possibilities that it had been an accident (tram tracks or defective brakes) (Respondent 1-5)*
- *The policeman had suggested that the car may have failed in some way, the brakes or got caught on metal track (Respondent 1-33)*
- *It was possible that the tire caught the street car rail, or that the breaks were not working. (Respondent 1-76)*

The following respondents consolidated two discrete epistemic modal-worlds into a single modal-world represented by an 'accident' schema:

- *The police officer suggests that it could have been an accident (Respondent 1-10)*
- *The policeman says it may have been an accident (Respondent 1-14)*
- *Although her death is presented as an accident (Respondent 1-42)*
- *The police officer, although stating that this could be an accident (Respondent 1-46)*
- *They speak respectfully and suggest that the incident was an accident caused by streetcar lines. (Respondent 1-45)*
- *it is insinuated that it is an accident, that there was a fault with the car (Respondent 1-63)*

Group 2 Respondents

The following respondents replicated two discrete epistemic modal-worlds to represent the two possible explanations given for Laura's accidental death:

- *officials suggest possible problems with the tyres or the tram tracks on the bridge. (Respondent 1-5)*
- *Police had to say 2 witnesses reckoned it was deliberate but it could be brake failure or a problem with the road surface. (Respondent 1-22)*
- *The policeman suggests that tram tracks might have affected the tyres or the brakes were faulty (Respondent 2-31)*
- *The policeman who breaks the news to the narrator tells her it may have been faulty brakes, or that a tire got caught in the railroad track (Respondent 2-79)*
- *The policeman indicates possible causes of the accident (brake failure; car wheels getting caught in the rail tracks) (Respondent 2-80)*

The following respondents consolidated two discrete epistemic modal-worlds into a single modal-world represented by an 'accident' schema:

- *Police called the narrator, as it was her car, saying there'd been witnesses, and could've been an accident (Respondent 2-3)*
- *The assumption was that it was accidental although witnesses claimed she had intended to drive off the bridge (Respondent 2-11)*
- *The extract details the apparent suicide of Laura in what may, to an external observer, appear to be an accident. (Respondent 2-29)*
- *The police suggest it may have been a tragic accident because of the dangerous tracks on that section of the road/bridg (Respondent 1-40)*
- *At first, the cause was ascribed to the repairs on the road, but then two witnesses seem to confirm this was a deliberate act. (Respondent 2-58)*
- *The police informed her sister and suggested that it may have been an accident caused by a tyre getting caught in a streetcar track. (Respondent 2-81)*
- *While it was deemed, for the time being, accidental there were two witnesses who claimed the act seemed deliberate'(Respondent 2-84)*

Modal Generalising

Group 1 Respondents

The following respondents responded to beliefs attributed to specific eyewitnesses ('a retired lawyer and a bank teller') and reported them as more widely held, universally held or unattributed beliefs:

- *her sister who appeared to have deliberately driven off a bridge. (Respondent 1-11)*
- *It seemed to be a suicide (Respondent 1-21)*
- *The writer's sister died in a car crash which it seems may have been a deliberat act of suicide (Respondent 1-36)*

- *eye witnesses tend to believe what they saw was suicide. (Respondent 1-37)*
- *witnesses feel that Laura did this deliberately. (Respondent 1-52)*
- *'The narrator's sister seems to have committed suicide in a car,' (Respondent 1-82)*

Group 2 Respondents

The following respondents responded to beliefs attributed to specific eyewitnesses ('a retired lawyer and a bank teller') and reported them as more widely held, universally held or unattributed beliefs:

- *'here seems to be a suggestion that her sister committed suicide or deliberately drove a car off a bridge in Canada that was being repaired. (Respondent 2-12)*
- *It is suspected that Laura committed suicide (Respondent 2-17)*
- *Various people of note are called upon for their witness of the event (Respondent 2-26)*
- *in what may, to an external observer, appear to be an accident. (Respondent 2-29)*
- *there were signs that her sister took her life (Respondent 2-32)*
- *It seems as though it was intentional (Respondent 2-52)*
- *a woman who's sister has seemingly just committed suicide (Respondent 2-64)*
- *There are speculations as to whether it was deliberate or not (Respondent 2-83)*

The following respondents responded to beliefs attributed to a single character (the policeman) by reporting them as more widely held or universal beliefs:

- *Police suggested the tram tracks may have affected the steering. (Respondent 2-4)*
- *the officials suggest possible problems with the tyres or the tram tracks on the bridge. (Respondent 2-5)*
- *The assumption was that it was accidental (Respondent 2-11)*
- *the police suspect Laura committed suicide (Respondent 2-18)*
- *The police suggest it may have been a tragic accident (Respondent 2-30)*
- *Police imply her sister may have taken her own life. (Respondent 2-56)*

- *it was deemed, for the time being, accidental (Respondent 2-84)*

The following respondent claimed the following universally-held belief which was not expressed in the source text:

- *no-one wants to believe that she has left her perfect life (Respondent 2-55)*

Removal of Negation

Prompt text

Nothing much was left of her but charred smithereens.

Group 1 Respondents

The following respondents described Laura's body by prompting a negated text-world:

- *there was little left of either car or of the driver (Respondent 1-5)*
- *her body is unidentifiable (Respondent 1-29)*
- *they needed someone to identify the body, not that there was much of it left. (Respondent 1-33)*
- *The car landed in the ravine and sets on fire, leaving no remains. (Respondent 1-63)*
- *The car falls into the ravine below, passing through the 'feathery' treetops before hitting the ground below and catching fire, leaving nothing but charred remains. (Respondent 1-64)*
- *There wasn't much left of the body (Respondent 1-65)*

The following respondents described Laura's body without prompting a negated text-world:

- *the driver's body was badly damaged (in smithereens) (Respondent 1-21)*
- *the body was burned and charred (Respondent 1-68)*
- *Sections of the bridge fell onto what was left of the car and she was 'smashed to smithereens'. (Respondent 1-39)*
- *describing their sisters 'charred remains' (Respondent 1-50)*

- *The sisters' body was severely damaged (Respondent 1-75)*

Group 2 Respondents

The following respondents described Laura's body by prompting a negated text-world:

- *her sister drove through a danger sign and into a ravine, catching fire, with nothing left of her but charred smithereens (Respondent 2-19)*
- *Nothing left of the car but 'smithereens' (Respondent 2-21)*

The following respondents described Laura's body without prompting a negated text-world:

- *She had charred remains. (Participant 2-7)*

Example 2: Prompt text

My sister was never a good driver

Group 1 Respondents

The following respondents described Laura's driving by prompting a negated text-world:

- *The narrator tells the policeman that her sister was never a good driver, (Respondent 1-27)*
- *The brother claimed that his sister was not a good driver (Respondent 1-49)*
- *her sister was never a good driver. (Respondent 1-75)*
- *her sister was not a good driver (Respondent 1-87)*

The following respondents described Laura's driving without prompting a negated text-world:

- *Laura had always been a bad driver. (Respondent 1-4)*
- *The woman says it was an accident as her sister was a bad driver (Respondent 1-23)*
- *Laura is a terrible driver. (Respondent 1-34)*
- *he said it was surely a mistake as Laura is a terrible driver. (Respondent 1-35)*
- *in acknowledging the inquest says that her sister was a 'bad driver' (Respondent 1-64)*

Group 2 Respondents

The following respondents described Laura's driving by prompting a negated text-world:

- *she is sure it was an accident as her sister was never a good driver. (Respondent 2-36)*
- *she was not the best driver (Respondent 2-42)*
- *her sister was never good at driving (Respondent 2-65)*
- *her sister wasn't a good driver (Respondent 2-86)*

The following respondents described Laura's driving without prompting a negated text-world:

- *She [...] was a careless driver (Respondent 2-9)*
- *her sister never drank and was a careless driver. (Respondent 2-29)*

Substitution of Worlds of Different Modality, Suggesting Application of Schematic Knowledge

Example 2: Prompt text

My sister was never a good driver

Group 1 Respondents

The following respondent recreated the boulomaic modal-world in the prompt text:

- *The sister [...] assumes the police would like someone to identify the body. (Respondent 1-80).*

The following respondents invoked the suggestion that Iris would identify the body within a deontic modal-world:

- *She accepts however that she will have to go and identify the body (Respondent 1-5)*
- *they needed someone to identify the body (Respondent 1-33)*

- *she probably has to identify the body (Respondent 1-76)*
- *She will need to go to identify the body. (Respondent 1-76)*

Group 2 Respondents

No respondents recreated the boulomaic modal-world in the prompt text: The following respondents invoked the suggestion that Iris would identify the body within a deontic modal-world:

- *she had to identify the body. (Respondent 2-1)*
- *...and talks of having to go identify the body. (Respondent 2-6)*

Addition of Novel Worlds not Prompted by the Source Text

Group 1 Respondents

The following respondents produced summaries which prompted worlds that were not prompted by the source text. (Linguistic markers of novel worlds are underlined).

- *The narrator is herself convinced that her sister did commit suicide (Participant 1-5)*
- *the woman also thinks it was deliberate (Respondent 1-6)*
- *she doesn't believe that Laura has killed herself (Respondent 1-8)*
- *she knows that the sister has committed suicide on purpose [...] she thinks the suicide is a way of causing anguish to the family (Respondent 1-10)*
- *the narrator also seems quite restrained (Respondent 1-12)*
- *She describes what her sister must have been wearing (Respondent 1-14)*
- *'the narrator herself has no doubt to the fact' (Respondent 1-15)*
- *The woman says it was an accident as her sister was a bad driver but she knows that is not correct. (Respondent 1-22)*
- *She begins to establish the family's public narrative that this was an accident rather than suicide, though she clearly knows that it is. (Respondent 1-25)*

- *The narrator tells the policeman that her sister was never a good driver, hoping, it seems to suggest that the action was accidental. (Respondent 1-27)*
- *she would prefer it is seen as an accident. (Respondent 1-29)*
- *it seems may have been a deliberate act of suicide, and perhaps more - a revengeful act (Respondent 1-36)*
- *The woman was not surprised (Respondent 1-39)*
- *she [...] thought of her sister as willful (Respondent 1-41)*
- *The results were catastrophic, there was no chance of survival. (Respondent 1-43)*
- *It seems Laura had something on her mind regarding the narrator (Respondent 1-45)*
- *The woman seems to not be completely surprised by the event. (Respondent 1-46)*
- *The woman describes her anger towards the sister and the police officer, and hints at a negative relationship between herself and her sister, implying that she may have taken her own life in part to spite her family. (Respondent 1-48)*
- *This implies some kind of family/sibling fallout that happened prior, (Respondent 1-50)*
- *There is the impression of unspoken family resentments (Respondent 1-55)*
- *She wants to believe that her sister did not do it on purpose (Respondent 1-57)*
- *being informed of the event by a policeman, who is polite and respectful - possibly as a courtesy to the protagonist's husband. (Respondent 1-64)*
- *there is no possibility that she could have survived. (Respondent 1-66)*
- *she believes it was a pointed statement that she wanted nothing more to do with her. (Respondent 1-78)*
- *Although she knows it is suicide (Respondent 1-83)*
- *The narrator does not seem to want to believe that (Respondent 1-87)*

Group 2 Respondents

The following respondents produced summaries which prompted worlds that were not prompted by the source text. (Linguistic markers of novel worlds are underlined).

- *Laura probably killed herself while driving (Respondent 2-3)*
- *'i imagines it being in America for some reason. (Respondent 2-5)*
- *she suspects this was intentional' (Respondent 1-8)*
- *There seems to be a suggestion that her sister committed suicide or deliberately drove a car off a bridge (Respondent 2-12)*
- *The narrator seems to admire her sister (Respondent 2-12)*
- *There is a another character called Richard but we don't know who that is. (Respondent 2-12)*
- *Laura's sister is aware that Laura committed suicide (Respondent 2-28)*
- *The sister is torn between feeling privately that her sister may well have deliberately driven off the bridge (Respondent 2-31)*
- *the teller, I suspect, knew the reason why her sister did it. (Respondent 2-32)*
- *We are not sure at this stage whether she had deliberately driven the car off the bridge or not. (Respondent 2-40)*
- *Police imply her sister may have taken her own life. Main character doesn't believe this (Respondent 2-56)*
- *We do not get to understand what the narrator believes (Respondent 2-63)*
- *which I think suggested that the crash was caused by council neglect of road safety (Respondent 2-64)*
- *We learn Mr. Griffen was a high profile person, I think a manufacturer. (Respondent 2-65)*
- *This seems believed by the wife even as she denies it (Respondent 2-70)*
- *The narrator knows it was not an accident (Respondent 2-77)*
- *Somehow the reader is led to believe that the narrator, and others, are responsible for her suicide. (Respondent 2-88)*

References

- Alber, Jan. 2014. 'Unnatural Narratology', *The Living Handbook of Narratology*, ed. by Peter Hühn, JC Meister, J Pier, and W Schmid
<<https://www-archiv.fdm.uni-hamburg.de/lhn/node/104.html>> [accessed 6 February 2023]
- Alber, Jan, and Monika Fludernik (eds.). 2010. *Postclassical Narratology: Approaches and Analyses* (Columbus: The Ohio State University Press)
- Anderson, Chris. 2007. *The Long Tail: How Endless Choice Is Creating Unlimited Demand* (New York: Random House)
- Andrade, Jackie, and Jon May. 2004. *BIOS Instant Notes in Cognitive Psychology* (New York: Garland Science)
- Annalyn, Ng, Maarten W. Bos, Leonid Sigal, and Boyang Li. 2020. 'Predicting Personality from Book Preferences with User-Generated Content Labels', *IEEE Transactions on Affective Computing*, 11.3: 482–92
- Appleton, Sarah A. 2009. *Once Upon a Time: Myth, Fairy Tales and Legends in Margaret Atwood's Writings* (Cambridge: Cambridge Scholars Publishing)
- Atkinson, R. C., and R. M. Shiffrin. 1968. 'Human Memory: A Proposed System and Its Control Processes', in *Psychology of Learning and Motivation*, ed. by Kenneth W. Spence and Janet Taylor Spence (Cambridge, MA: Elsevier Academic Press), 89–195
- Atwood, Margaret. 1979. *Surfacing* (London: Virago)
- . 1987. *The Handmaid's Tale* (London: Virago)
- . 1988. *Cat's Eye* (London: Virago)
- . 2000. *The Blind Assassin* (London: Virago)
- . 2002. *Negotiating with the Dead: A Writer on Writing* (London: Virago)
- . 2003. *Oryx and Crake* (London: Virago)
- . 2014. *Stone Mattress: Nine Wicked Tales* (London: Virago)
- Baddeley, Alan. 1983. 'Working Memory', *Philosophical Transactions of the Royal Society of London. B, Biological Sciences*, 302.1110 (The Royal Society London): 311–24
- . 1992. 'Working Memory', *Science*, 255.5044 (American Association for the Advancement of Science): 556–59

- . 1999. *Essentials of Human Memory* (Hove: Psychology Press Ltd)
- . 2010. 'Working Memory', *Current Biology*, 20.4: 136–40
- Baddeley, Alan, and Graham Hitch. 1974. 'Working Memory', in *Psychology of Learning and Motivation*, ed. by Gordon H. Bower (Cambridge, MA: Elsevier Academic Press), 47–89
- Bakhtin, Mikhail Mikhaïlovich. 1981. *The Dialogic Imagination: Four Essays*, trans. by Michael Holquist (Austin: University of Texas Press)
- Bal, Mieke. 1985. *Narratology: Introduction to the Theory of Narrative* (Toronto: University of Toronto Press)
- Banfield, Ann. 1982. *Unspeakable Sentences: Narration and Representation in the Language of Fiction* (London: Routledge)
- Baron-Cohen, Simon. 1997. *Mindblindness: An Essay on Autism and Theory of Mind* (Cambridge, MA: MIT press)
- Barthes, Roland. 1975. 'An Introduction to the Structural Analysis of Narrative', *New Literary History*, 6.2, trans. by Lionel Duisit (JSTOR): 237–72
- . 1989. *The Rustle of Language* (Los Angeles: The University of California Press)
- Bartl, Sara, and Ernestine Lahey. 2023. "'As the Title Implies": How Readers Talk About Titles in Amazon Book Reviews', *Language and Literature*, 32.2: 209–30
- Bartlett, F. C. 1932. *Remembering: A Study in Experimental and Social Psychology* (London: Cambridge University Press)
- Bell, Alice. 2010. *The Possible Worlds of Hypertext Fiction* (Berlin: Springer)
- Bell, Alice, Astrid Ensslin, Isabelle van der Bom, and Jen Smith. 2018. 'Immersion in Digital Fiction', *International Journal of Literary Linguistics*, 7.1: 1–22
- Bell, Alice, Astrid Ensslin, Isabelle van der Bom, and Jen Smith. 2019. 'A Reader Response Method Not Just for "You"', *Language and Literature*, 28.3: 241–62
- Bell, Alice, Alison Gibbons, and David Peplow. 2021. *Style and Reader Response: Minds, Media, Methods* (Amsterdam: John Benjamins Publishing Company)
- Bell, Alice, and Marie-Laure Ryan. 2019. *Possible Worlds Theory and Contemporary Narratology* (Lincoln and London: University of Nebraska Press)

- Bennett, Andrew, and Nicholas Royle. 2016. *An Introduction to Literature, Criticism and Theory*, 5th edn (London: Routledge)
- Berlin, Brent. 1978. 'Ethnobiological Classification', in *Cognition and Categorization*, ed. by Eleanor Rosch and Barbara B. Lloyd (Hillsdale, New Jersey: Erlbaum), 9–26
- Bertens, Hans. 2012. *Literary Theory: The Basics* (Abingdon: Routledge)
- Booth, Wayne C. 1961. *The Rhetoric of Fiction* (Chicago: University of Chicago Press)
- Bottez, Monica. 2017. 'The Symbolism of Rebirth in Margaret Atwood's *Surfacing*', *University of Bucharest Review. Literary and Cultural Studies Series*, 7.1: 17–24
- Bouson, J. Brooks. 1993. *Brutal Choreographies: Oppositional Strategies and Narrative Design in the Novels of Margaret Atwood* (Amherst: The University of Massachusetts Press)
- . 2003. "'A Commemoration of Wounds Endured and Resented': Margaret Atwood's *The Blind Assassin* as Feminist Memoir", *Critique: Studies in Contemporary Fiction*, 44.3: 251–69
- . 2021. 'Margaret Atwood and Environmentalism', in *The Cambridge Companion to Margaret Atwood*, 2nd edn, ed. by Coral Ann Howells (Cambridge: Cambridge University Press), 76–91
- Brainerd, C. J., and V. F. Reyna. 2005. *The Science of False Memory* (Oxford: Oxford University Press)
- Bransford, John D., and Marcia K. Johnson. 1972. 'Contextual Prerequisites for Understanding: Some Investigations of Comprehension and Recall', *Journal of Verbal Learning and Verbal Behavior*, 11.6 (Elsevier): 717–26
- Bray, Joe. 2001. 'The Source of "Dramatized Consciousness": Richardson, Austen, and Stylistic Influence', *Style*, 35.1: 18–32
- . 2007. 'The "Dual Voice" of Free Indirect Discourse: A Reading Experiment', *Language and Literature*, 16.1: 37–52
- Brayman, A., and D. Cramer. 2011. *Quantitative Data Analysis with IBM SPSS 17, 18 and 19: A Guide for Social Scientists* (New York: New York Psychology Press)
- Brooks, Lee. 1978. 'Nonanalytic Concept Formation and Memory for Instances', in *Cognition and Categorization*, ed. by Eleanor Rosch and Barbara B. Lloyd (Hillsdale, New Jersey: Erlbaum), 170–216
- Browse, Sam. 2016. 'Revisiting Text World Theory and Extended Metaphor: Embedding and Foregrounding Extended Metaphors in the Text-Worlds of the 2008 Financial Crash', *Language and Literature*, 25.1: 18–37

- Bruner, Jerome. 1986. *Actual Minds, Possible Worlds* (Cambridge, MA: Harvard University Press)
- . 1991. 'The Narrative Construction of Reality', *Critical Inquiry*, 18.1: 1–21
- Burke, Michael. 2004. 'Cognitive Stylistics in the Classroom', *Style*, 38.4: 491–509
- . 2014. *The Routledge Handbook of Stylistics* (Abingdon: Routledge)
- Canning, Patricia. 2017. 'Text World Theory and Real World Readers: From Literature to Life in a Belfast Prison', *Language and Literature*, 26.2: 172–87
- Carrol, Gareth, Kathy Conklin, Josephine Guy, and Rebekah Scott. 2015. 'Processing Punctuation and Word Changes in Different Editions of Prose Fiction', *Scientific Study of Literature*, 5.2: 200–228
- Carroll, Lewis. 1856. *Alice in Wonderland* (Oxford: Oxford University Press)
- Castiglione, Davide. 2017. 'Difficult Poetry Processing: Reading Times and the Narrativity Hypothesis', *Language and Literature*, 26.2: 99–121
- Cavalcanti, Ildney. 2000. 'Utopias of/f Language in Contemporary Feminist Literary Dystopias', *Utopian Studies*, 11.2: 152–80
- Chamorro-Premuzic, Tomas, Stian Reimers, Anne Hsu, and Gorkan Ahmetoglu. 2009. 'Who Art Thou? Personality Predictors of Artistic Preferences in a Large UK Sample: The Importance of Openness', *British Journal of Psychology*, 100.3: 501–16
- Chomsky, Noam. 1964. 'Current Issues in Linguistic Theory', in *The Structure of Language*, ed. by Jerry A. Fodor and Jerrold J. Katz (New York: Prentice Hall)
- Clark, Meera T. 1983. 'Margaret Atwood's "Surfacing": Language, Logic and the Art of Fiction', *Modern Language Studies*, 13.3: 3–15
- Cook, Guy. 1994. *Discourse and Literature: The Interplay of Form and Mind* (Oxford: Oxford University Press)
- Cooke, Nathalie. 1992. 'Reading Reflections: The Autobiographical Illusion in *Cat's Eye*', in *Essays on Life Writing: From Genre to Critical Practice*, ed. by Marlene Kadar (Toronto: University of Toronto Press), 162–70
- . 2004. *Margaret Atwood: A Critical Companion* (Westport, CT: Greenwood Publishing Group)
- Corsini, Raymond J. 1999. *The Dictionary of Psychology* (Hove: Psychology Press)
- Croft, William., and D. A. Cruse. 2004. *Cognitive Linguistics* (Cambridge: Cambridge University Press)

- Cruikshank, Tracy, and Ernestine Lahey. 2010. 'Building the Stages of Drama: Towards a Text World Theory Account of Dramatic Play-Texts', *Journal of Literary Semantics*, 39.1: 67–91
- Culler, Jonathan D. 1975. *Structuralist Poetics: Structuralism, Linguistics and the Study of Literature* (London: Routledge)
- Damasio, Antonio R. 1999. *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (London: Vintage)
- Dancygier, Barbara. 2007. 'Narrative Anchors and the Processes of Story Construction: The Case of Margaret Atwood's *The Blind Assassin*', *Style*, 41.2: 133–51
- Daneman, Meredyth, and Philip M. Merikle. 1996. 'Working Memory and Language Comprehension: A Meta-Analysis', *Psychonomic Bulletin & Review*, 3.4: 422–33
- Davies, Máire Messenger, and Nick Mosdell. 2006. *Practical Research Methods for Media and Cultural Studies: Making People Count* (Athens, GA: University of Georgia Press)
- Davis, Madeleine. 2006. 'Margaret Atwood's Female Bodies', in *The Cambridge Companion to Margaret Atwood*, ed. by Coral Ann Howells (Cambridge: Cambridge University Press), 43–57
- De Vooght, Edward, and Guylian Nemegeer. 2021. 'Reading and Analysing Short Story Collections: An Empirical Study of Readers' Interpretation Process of Benni's *Il Bar Sotto Il Mare*', *Language and Literature*, 30.4: 361–80
- Dennett, Daniel. 1993. *Consciousness Explained* (London: Little, Brown and Company)
- D'Ercole, Martina, Paolo Castelli, Anna Maria Giannini, and Antonella Sbrilli. 2010. 'Mental Imagery Scale: A New Measurement Tool to Assess Structural Features of Mental Representations', *Measurement Science and Technology*, 21.5: 1–8
- Derrida, Jacques. 1967a. *Of Grammatology* (Baltimore, MD: John Hopkins University Press)
- . 1967b. *Writing and Difference* (Abingdon: Routledge)
- van Dijk, Teun A., and Walter Kintsch. 1983. *Strategies of Discourse Comprehension* (London: Elsevier Academic Press)
- Doležel, Lubomír. 1979. 'Extensional and Intensional Narrative Worlds', *Poetics*, 8.1–2: 193–211
- . 1980. 'Truth and Authenticity in Narrative', *Poetics Today*, 1.3: 7–25
- . 1998. 'Possible Worlds of Fiction and History', *New Literary History*, 29.4: 785–809
- Dubrow, Heather. 1982. *Genre* (Abingdon: Routledge)

- Duchan, Judith F., Gail A. Bruder, and Lynne E. Hewitt. 1995. *Deixis in Narrative: A Cognitive Science Perspective* (Hilldale, NJ: Lawrence Erlbaum Associates)
- Dunbar, Robin Ian MacDonald. 1996. *Grooming, Gossip, and the Evolution of Language* (Cambridge, MA: Harvard University Press)
- Eagleton, Terry. 1983. *Literary Theory: An Introduction* (Oxford: Blackwell Pub)
- Eco, Umberto. 1981. *The Role of the Reader: Explorations in the Semiotics of Texts* (London: Hutchinson & Co (Publishers) Ltd)
- Elfenbein, Andrew. 2018. *The Gist of Reading* (Stanford, CA: Stanford University Press)
- Emmott, Catherine. 1997. *Narrative Comprehension: A Discourse Perspective* (Oxford: Clarendon Press)
- Emmott, Catherine, and Marc Alexander. 2014. 'Foregrounding, Burying and Plot Construction', in *The Cambridge Handbook of Stylistics*, 1st edn, ed. by Peter Stockwell and Sara Whiteley (Cambridge: Cambridge University Press), 329–43
- Eysenck, Michael W., and Mark T. Keane. 2020. *Cognitive Psychology: A Student's Handbook*, 8th edn (Abingdon: Routledge)
- Fancourt, Daisy, Louise Baxter, and Fabiana Lorencatto. 2020. 'Barriers and Enablers to Engagement in Participatory Arts Activities Amongst Individuals with Depression and Anxiety: Quantitative Analyses Using a Behaviour Change Framework', *BMC Public Health*, 20.1: 1-12
- Fancourt, Daisy, and Hei Wan Mak. 2020. 'What Barriers Do People Experience to Engaging in the Arts? Structural Equation Modelling of the Relationship Between Individual Characteristics and Capabilities, Opportunities, and Motivations to Engage', *PLOS ONE*, 15.3 (Public Library of Science)
- Fauconnier, Gilles. 1985. *Mental Spaces: Aspects of Meaning Construction in Natural Language* (Cambridge: Cambridge University Press)
- . 1997. *Mappings in Thought and Language* (Cambridge: Cambridge University Press)
- Fauconnier, Gilles, and Mark Turner. 2002. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books)
- Fiamengo, Janice. 1999. 'Postcolonial Guilt in Margaret Atwood's *Surfacing*', *American Review of Canadian Studies*, 29.1: 141–63

- Filardo-Llamas, Laura. 2019. 'Cultural Responses to 9/11 and the Healing Power of Songs: A Text World Theory Analysis of Bruce Springsteen's "The Rising"', in *Cognitive Linguistic Approaches to Text and Discourse: From Poetics to Politics*, ed. by Christopher Hart (Edinburgh: Edinburgh University Press), 111–30
- Filipczak, Dorota. 1993. 'Is There No Balm in Gilead?: Biblical Intertext in the Handmaid's Tale', *Literature and Theology*, 7.2: 171–85
- Fillmore, Charles J. 1977. 'Scenes and Frames Semantics', in *Linguistic Structures Processing*, ed. by Antonio Zampolli (Amsterdam: North-Holland Publishing Company), 55–79
- Fillmore, Charles J. 1985. 'Frames and the Semantics of Understanding', *Quaderni Di Semantica*, 6.2: 222–54
- Fillmore, Charles J. and The Linguistics Society of Korea. 1982. *Frame Semantics* (Seoul: Hanshin Publishing Co)
- Fish, Stanley. 1980. *Is There a Text in This Class?: The Authority of Interpretive Communities* (Harvard University Press)
- Fish, Stanley E. 1996. 'What Is Stylistics and Why Are They Saying Such Terrible Things About It?', in *The Stylistic Reader*, ed. by Jean Jacques Weber (London: Hodder Headline Group)
- Fludernik, Monika. 2002. *Towards a 'Natural' Narratology* (Abingdon: Routledge)
- . 2005. 'Histories of Narrative Theory (II): From Structuralism to the Present', in *A Companion to Narrative Theory*, ed. by James Phelan and Peter J. Rabinowitz (Oxford: Blackwell), 36–59
- Fodor, Jerry A., and Zenon W. Pylyshyn. 1988. 'Connectionism and Cognitive Architecture: A Critical Analysis', *Cognition*, 28.1–2 (Elsevier): 3–71
- Fowler, Roger. 1977. *Linguistics and the Novel* (London: Methuen)
- Freeman, Margaret H. 2017. 'Cognitive Poetics', in *The Routledge Handbook of Stylistics* (Abingdon: Routledge), 331–46
- Frow, John. 1986. 'Spectacle Binding: On Character', *Poetics Today*, 7.2: 227–50
- Frye, Northrop. 1957. *Anatomy of Criticism: Four Essays* (New Jersey: Princeton University Press)
- Galbraith, Mary. 1994. 'Pip as "Infant Tongue" and as Adult Narrator in Chapter One of Great Expectations', in *Infant Tongues: The Voices of the Child in Literature*, ed. by Mark A. Heberle, Elizabeth Goodenough, and Naomi B. Sokoloff (Detroit: Wayne State UP)

- . 1995. 'Deictic Shift Theory and the Poetics of Involvement in Narrative', in *Deixis in Narrative: A Cognitive Science Perspective*, ed. by Duchan, Judith F., Gail A. Bruder, and Lynne E. Hewitt (Hillsdale, NJ: Lawrence Erlbaum), 19–60
- Gardner, Howard. 1987. *The Mind's New Science: A History of the Cognitive Revolution* (New York: Basic Books)
- Gavins, Joanna. 2001. 'Text World Theory: A Critical Exposition and Development in Relation to Absurd Prose Fiction' (Unpublished PhD thesis, Sheffield Hallam University)
<<https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.393914>> [accessed 17 July 2019]
- . 2003. 'Too Much Blague? An Exploration of the Text Worlds of Donald Barthelme's Snow White', in *Cognitive Poetics in Practice*, ed. by Joanna Gavins and Gerard Steen (Abingdon: Routledge), 141–56
- . 2005. '(Re)Thinking Modality: A Text-World Perspective', *Journal of Literary Semantics*, 34.2 (Walter de Gruyter): 79–93
- . 2007. *Text World Theory: An Introduction* (Edinburgh: Edinburgh University Press)
- . 2012. 'Leda and the Stylisticians', *Language and Literature*, 21.4: 345–62
- . 2013. *Reading the Absurd* (Edinburgh: Edinburgh University Press)
- . 2014. 'Defamiliarisation', in *The Cambridge Handbook of Stylistics*, Cambridge Handbooks in Language and Linguistics, ed. by Peter Stockwell and Sara Whiteley (Cambridge: Cambridge University Press), 196–211
- . 2016. 'Text-Worlds', in *The Bloomsbury Companion to Stylistics*, ed. by Violeta Sotirova (London: Bloomsbury), 444–57
- . 2020. *Poetry in the Mind: The Cognition of Contemporary Poetic Style* (Edinburgh: Edinburgh University Press)
- Gavins, J., S. Whiteley, and D. Candarli. 2021. 'Linguistic Co-Creativity and the Performance of Identity in the Discourse of National Trust Holiday Cottage Guestbooks', *Language and Literature*, 30.4: 381–406
- Gavins, Joanna, and Ernestine Lahey. 2016. *World Building: Discourse in the Mind*, ed. by Joanna Gavins and Ernestine Lahey (London: Bloomsbury)
- Gavins, Joanna, and Gerard. Steen. 2003. *Cognitive Poetics in Practice* (Abingdon: Routledge)
- Gavins, Joanna, and Peter Stockwell. 2012. 'About the Heart, Where It Hurt Exactly, and How Often', *Language and Literature*, 21.1: 33–50

- Genette, Gérard. 1980. *Narrative Discourse: An Essay in Method* (New York: Cornell University Press)
- Gerrig, Richard. 1993. *Experiencing Narrative Worlds* (Abingdon: Routledge)
- Gerrig, Richard J., and Giovanna Egidi. 2003. 'Cognitive Physiological Foundations of Narrative Experiences', in *Narrative Theory and the Cognitive Sciences*, ed. by David Herman (Stanford, CA: CSLI Publications), 33–55
- Gibbons, Alison. 2016. 'Building Hollywood in Paddington: Text World Theory, Immersive Theatre, and Punchdrunk's *The Drowned Man*', in *World Building: Discourse in the Mind*, ed. by Joanna Gavins and Ernestine Lahey (London: Bloomsbury academic), 71–89
- . 2023. 'Text World Theory and Situation-Model Research: Enhancing Validity and Tracking World-Retrievals', *Journal of Literary Semantics*, 52.1: 3–21
- Gibbons, Alison, and Sara Whiteley. 2018. *Contemporary Stylistics: Language, Cognition, Interpretation* (Edinburgh: Edinburgh University Press)
- . 2021. 'Do Worlds Have (Fourth) Walls? A Text World Theory Approach to Direct Address in *Fleabag*', *Language and Literature*, 30.2: 105–26
- Giovanelli, Marcello. 2010. 'Pedagogical Stylistics: A Text World Theory Approach to the Teaching of Poetry', *English in Education*, 44.3: 214–31
- . 2013. *Text World Theory and Keats' Poetry: The Cognitive Poetics of Desire, Dreams and Nightmares* (London: Bloomsbury)
- . 2018. "'Something Happened, Something Bad": Blackouts, Uncertainties and Event Construal in *The Girl on the Train*', *Language and Literature*, 27.1: 38–51
- . 2019. 'Experiencing Literature in the Poetry Classroom', in *Experiencing Fictional Worlds*, ed. by Benedict Neurohr and Lizzie Stewart-Shaw (Amsterdam: John Benjamins Publishing Company), 15–32
- . 2022. 'Cognitive Grammar and Readers' Perceived Sense of Closeness: A Study of Responses to Mary Borden's "*Belgium*"', *Language and Literature*, 31, 407-27
- Giovanelli, Marcello, and Chloe Harrison. 2018. *Cognitive Grammar in Stylistics: A Practical Guide* (London: Bloomsbury Publishing)
- Giovanelli, Marcello, and Jessica Mason. 2015. "'Well I Don't Feel That": Schemas, Worlds and Authentic Reading in the Classroom', *English in Education*, 49.1: 41–55

- Goldberg, Lewis R. 1992. 'The Development of Markers for the Big-Five Factor Structure', *Psychological Assessment*, 4: 26–42
- Grace, Sherrill. 1994. 'Gender as Genre: Atwood's Autobiographical "I"', in *Margaret Atwood: Writing and Subjectivity: New Critical Essays*, ed. by Colin Nicholson, (New York: Springer), 189–203
- Grace, Sherrill E. 1980. *Violent Duality: A Study of Margaret Atwood* (Montreal: Véhicule Press)
- Graesser, Arthur C., Keith K. Millis, and Rolf A. Zwaan. 1997. 'Discourse Comprehension', *Annu. Rev. Psychol*, 48: 163–89
- Graham, George. 2019. 'Behaviorism', in *The Stanford Encyclopedia of Philosophy*, Spring 2019, ed. by Edward N. Zalta (Metaphysics Research Lab, Stanford University)
<<https://plato.stanford.edu/archives/spr2019/entries/behaviorism/>> [accessed 27 July 2022]
- Greep, Monica. 2022. 'Margaret Atwood Says The Handmaid's Tale Wasn't "Written as a Feminist Novel" and She Was Simply "Writing a Dystopian Novel from the Female Point of View"', *Mail Online*
<<https://www.dailymail.co.uk/femail/article-10557357/Margaret-Atwood-says-Handmaids-Tale-wasnt-written-feminist-novel.html>> [accessed 11 January 2023]
- Gregoriou, Christiana. 2021. 'Rewriting Misdirection: A Stylistic Approach to Crime Fiction Writing', in *Narrative Retellings: Stylistic Approaches*, ed. by Marina Lambrou (Bloomsbury London), 93–110
- Gregory, Dominic, and Amy Kind. 2016. 'Imagination and Mental Imagery', in *The Routledge Handbook of Philosophy of Imagination*, ed. by Amy Kind (Abingdon: Routledge), 97–110
- Habib, M. A. R. 2011. *Literary Criticism from Plato to the Present: An Introduction* (Baltimore, MD: John Wiley & Sons)
- Hakemulder, Frank, Olivia Fialho, and P. Matthijs Bal. 2016. 'Learning from Literature', *Scientific Approaches to Literature in Learning Environments*, 24: 19–37
- Hakemulder, Frank, and Willie van Peer. 2015. 'Empirical Stylistics', in *The Bloomsbury Companion to Stylistics*, ed. by Violeta Sotirova (London: Bloomsbury), 189–207
- Halliday, Michael. 1985. *An Introduction to Functional Grammar* (Abingdon: Routledge)
- Hamburger, Käte. 1973. *The Logic of Literature* (Bloomington: Indiana University Press)
- Harker, W. John. 1988. 'Literary Communication: The Author, the Reader, the Text', *Journal of Aesthetic Education*, 22.2: 5–14

- Harrison, Chloe. 2017. *Cognitive Grammar in Contemporary Fiction* (Amsterdam: John Benjamins Publishing Company)
- . 2023. '99 Ways to Retell a Story: The Styles and Functions of Narrator Reconstrual', *Style*, 57.2: 163–86
- Harrison, Chloe, and Louise Nuttall. 2018. 'Re-Reading in Stylistics', *Language and Literature*, 27.3: 176–95
- . 2019. 'Cognitive Grammar and Reconstrual: Re-Experiencing Margaret Atwood's 'The Freeze-Dried Groom'', in *Experiencing Fictional Worlds*, ed. by Benedict Neurohr and Lizzie Stewart-Shaw (Amsterdam: John Benjamins Publishing Company), 135-154
- . 2020. 'Rereading as Retelling: Re-Evaluations of Perspective in Narrative Fiction', in *Narrative Retellings: Stylistic Approaches*, ed. by Marina Lambrou (London: Bloomsbury Academic), 217–34
- Herman, David. 2002. *Story Logic: Problems and Possibilities of Narrative* (Lincoln and London: University of Nebraska Press)
- (ed.). 2003. *Narrative Theory and the Cognitive Sciences*, Lecture Notes (Stanford, CA: University of Chicago Press)
- . 2009. *Basic Elements of Narrative* (Oxford: Wiley-Blackwell)
- Hite, Molly. 1995. 'Optics and Autobiography in Margaret Atwood's *Cat's Eye*', *Twentieth Century Literature*, 41.2: 135-159
- Hofweber, Thomas. 2018. 'Logic and Ontology', in *Stanford Encyclopedia of Philosophy*. (Stanford, CA: Stanford University)
<<https://plato.stanford.edu/entries/logic-ontology/>> [accessed 25 June 2019]
- Hogan, Patrick Colm. 2003. *The Mind and Its Stories* (Cambridge: Cambridge University Press)
- Holland, Norman N. 1975. 'Unity Identity Text Self', *PMLA*, 90.5 (Cambridge University Press): 813–22
- Howells, Coral. 2017. 'True Trash: Genre Fiction Revisited In Margaret Atwood's *Stone Mattress*, *The Heart Goes Last*, And *Hag-Seed*', *Contemporary Women's Writing*, 11.3 (Oxford University Press UK): 297–315
- Howells, Coral Ann. 2006. 'Introduction', in *The Cambridge Companion to Margaret Atwood*, ed. by Coral Ann Howells (Cambridge: Cambridge University Press)

- . 2017. 'True Trash: Genre Fiction Revisited In Margaret Atwood's Stone Mattress, The Heart Goes Last, And Hag-Seed', *Contemporary Women's Writing*, 11.3: 297–315
- . 2021. *The Cambridge Companion to Margaret Atwood: 2nd Edition* (Cambridge: Cambridge University Press)
- Ingersoll, Earl. 1992. *Margaret Atwood: Conversations* (London: Virago Press Ltd)
- . 2003. 'Waiting for the End: Closure in Margaret Atwood's The Blind Assassin', *Studies in the Novel*, 35.4: 543–58
- Iser, Wolfgang. 1974. *The Implied Reader: Patterns of Communication in Prose Fiction from Bunyan to Beckett* (Baltimore, MA: John Hopkins University Press)
- . 1978. *The Act of Reading: A Theory of Aesthetic Response* (Baltimore, MD: Johns Hopkins University Press)
- Jackendoff, Ray. 1983. *Semantics and Cognition* (Cambridge, MA: The MIT Press)
- Jedličková, Alice. 2008. 'An Unreliable Narrator in an Unreliable World. Negotiating Between Rhetorical Narratology, Cognitive Studies and Possible Worlds Theory', in *Narrative Unreliability in the Twentieth-Century First-Person Novel*, Berlin/New York, ed. by Elke D'hoker and Gunther Martens (Berlin: de Gruyter), 281–302
- Johnson-Laird, P. N. 1980. 'Mental Models in Cognitive Science', *Cognitive Science*, 4.1: 71–115
- Johnson-Laird, Philip. 1983. *Mental Models: Towards a Cognitive Science of Language, Inference, and Consciousness* (Cambridge, MA: Harvard University Press)
- Johnson-Laird, Philip N. 2010. 'Mental Models and Human Reasoning', *Proceedings of the National Academy of Sciences*, 107.43: 18243–50
- Johnson, Mark. 1987. *The Body in the Mind : The Bodily Basis of Meaning, Imagination, and Reason* (Chicago: University of Chicago Press)
- Just, Marcel A., and Patricia A. Carpenter. 1992. 'A Capacity Theory of Comprehension: Individual Differences in Working Memory', *Psychological Review*, 99.1: 122–49
- Keen, Suzanne. 2007. *Empathy and the Novel* (Oxford: Oxford University Press on Demand)
- Kenward, Raymond, and Emmy Van Deurzen. 2005. *Dictionary of Existential Psychotherapy and Counselling* (Newbury Park, CA: Sage Publications)

- Ketterer, David. 1989. 'Margaret Atwood's "The Handmaid's Tale": A Contextual Dystopia ("La Servante Écarlate" de Margaret Atwood: Une Dystopie Contextuelle)', *Science Fiction Studies*, 16.2: 209–17
- Kintgen, Eugene R. 1980. 'The Perception of Poetry', *Style*, 14: 22–40
- Kintsch, Walter. 1995. 'How Readers Construct Situation Models for Stories: The Role of Syntactic Cues and Causal Inferences', in *Coherence in Spontaneous Text*, ed. by Morton Ann Gernsbacher and Talmy Givón (Amsterdam: John Benjamins Publishing Company), 139–60
- . 1998. *Comprehension: A Paradigm for Cognition* (Cambridge: Cambridge University Press)
- Kosslyn, Stephen. 1973. 'Scanning Visual Images: Some Structural Implications', *Perception & Psychophysics*, 14.1: 90–94
- . 1980. *Image and Mind* (Cambridge, MA: Harvard University Press)
- . 1996. *Image and Brain: The Resolution of the Imagery Debate* (Cambridge, MA: MIT Press)
- Kosslyn, Stephen, William L. Thompson, and Giorgio Ganis. 2006. *The Case for Mental Imagery* (Oxford: Oxford University Press)
- Kraemer, David JM, Lauren M. Rosenberg, and Sharon L. Thompson-Schill. 2009. 'The Neural Correlates of Visual and Verbal Cognitive Styles', *Journal of Neuroscience*, 29.12: 3792–98
- Kripke, Saul A. 1963. 'Semantical Analysis of Modal Logic I: Normal Modal Propositional Calculus', *Mathematical Logic Quarterly*, 9.5–6: 67–96
- Kuijpers, Moniek M. 2022. 'Bodily Involvement in Readers' Online Book Reviews: Applying Text World Theory to Examine Absorption in Unprompted Reader Response', *Journal of Literary Semantics*, 51.2 (De Gruyter Mouton): 111–29
- Kurtz, Victoria, and Michael F. Schober. 2001. 'Readers' Varying Interpretations of Theme in Short Fiction', *Poetics*, 29.3: 139–66
- Lahey, Ernestine. 2004. 'All the World's a Subworld: Direct Speech and Subworld Creation in "After" by Norman MacCaig', *Nottingham Linguistic Circular*, 18: 21–28
- . 2006. '(Re)Thinking World-Building: Locating the Text-Worlds of Canadian Lyric Poetry', *Journal of Literary Semantics*, 35.2: 145–64
- . 2007. 'Megametaphorical Mappings and the Landscapes of Canadian Poetry', in *Contemporary Stylistics*, ed. by Peter Stockwell and Marina Lambrou (London: Bloomsbury)

- . 2014. 'Stylistics and Text World Theory', in *The Routledge Handbook of Stylistics*, ed. by Michael Burke (Abingdon: Routledge London), 284–96
- . 2016. 'Author-Character Ethos in Dan Brown's Langdon-Series Novels', in *World Building: Discourse in the Mind*, ed. by Joanna Gavins and Ernestine Lahey (London: Bloomsbury), 33–52
- . 2019. 'World-Building as Cognitive Feedback Loop', in *Experiencing Fictional Worlds*, ed. by Benedict Neurohr and Lizzie Stewart-Shaw (Amsterdam: John Benjamins Publishing Company), 15–32
- Lakoff, George. 1987. *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind* (Chicago: University of Chicago Press)
- Lakoff, George., and Mark Johnson. 1980a. *Metaphors We Live By* (Chicago: University of Chicago Press)
- Lakoff, George, and Mark Johnson. 1980b. 'The Metaphorical Structure of the Human Conceptual System.', *Cognitive Science*: 195–2008
- Lambrou, Marina. 2022. *Narrative Retellings: Stylistic Approaches* (London: Bloomsbury Publishing)
- Langacker, Ronald W. 2008. *Cognitive Grammar: A Basic Introduction* (Oxford University Press)
- Lear, Martha. 1968. 'The Second Feminist Wave', *The New York Times*
<<https://www.nytimes.com/1968/03/10/archives/the-second-feminist-wave.html>> [accessed 10 January 2023]
- Leech, Geoffrey N., and Mick Short. 1981. *Style in Fiction: A Linguistic Introduction to English Fictional Prose*, (London: Pearson Education)
- Leibniz, Gottfried Wilhelm. 1956. *Philosophical Papers and Letters* (Chicago: Chicago University Press)
- Levitin, Daniel J. 2002. *Foundations of Cognitive Psychology: Core Readings* (Cambridge, MA: MIT Press)
- Lewis, David. 1978. *Truth in Fiction* (Champaign: University of Illinois Press)
- Loewenthal, Kate, and Christopher Alan Lewis. 2018. *An Introduction to Psychological Tests and Scales* (London: Psychology Press)
- Lugea, Jane. 2013. 'Embedded Dialogue and Dreams: The Worlds and Accessibility Relations of Inception', *Language and Literature*, 22.2: 133–53

- . 2016. 'Spanglish Dialogue in You and Me: An Absurd World and Senile Mind Style', in *World Building: Discourse in the Mind*, ed. by Joanna Gavins and Ernestine Lahey (London: Bloomsbury), 221–40
- Macrae, Andrea. 2016. 'You and I, Past and Present: Cognitive Processing of Perspective', *Diegesis*, 5.1
- Mandler, George. 2011. *A History of Modern Experimental Psychology: From James and Wundt to Cognitive Science* (Cambridge, MA: MIT Press)
- Manolika, Maria. 2022. 'The Big Five and Beyond: Which Personality Traits Do Predict Movie and Reading Preferences?', *Psychology of Popular Media*, 12.1: 197–206
- Mansworth, Megan. 2022. 'The Restricted Possible Worlds of Depression: A Stylistic Analysis of Janice Galloway's *The Trick Is to Keep Breathing* Using a Possible Worlds Framework', *Language and Literature*, 32.1: 28–45
- Martínez, María-Ángeles. 2018. *Storyworld Possible Selves* (Berlin: De Gruyter Mouton)
- Mason, Jessica. 2019. *Intertextuality in Practice* (Amsterdam: John Benjamins Publishing Company)
- McCombs, Judith. 1991. 'Contrary Re-Memberings: The Creating Self and Feminism in "Cat's Eye"', *Canadian Literature*: 9–23
- McKee, R. 1999. *Story: Substance, Structure, Style, and the Principles of Screenwriting* (London: Methuen)
- McLoughlin, Nigel. 2013. 'Negative Polarity in Eavan Boland's "The Famine Road"', *New Writing*, 10.2: 219–27
- . 2014. 'The Marvellous as we Know It: A Text World Analysis of Seamus Heaney's Squarings: Lightenings VIII', *New Writing*, 11.2: 228–39
- . 2019. 'Resonance and Absence: A Text World Analysis of "Tuonela" by Philip Gross', *New Writing*, 16.1: 89–99
- McWilliams, Ellen. 2007. 'Keeping Secrets, Telling Lies: Fictions of the Artist and Author in the Novels of Margaret Atwood', *Atantis: Critical Studies in Gender, Culture & Social Justice*, 32.1: 26–34
- . 2009. *Margaret Atwood and the Female Bildungsroman* (Abingdon: Routledge)
- Merleau-Ponty, Maurice. 1945. *Phenomenology of Perception* (Abingdon: Routledge)
- Miall, David S. 2006. *Literary Reading: Empirical & Theoretical Studies* (Lausanne: Peter Lang)

- Miall, David S., and Don Kuiken. 1994. 'Foregrounding, Defamiliarization, and Affect: Response to Literary Stories', *Poetics*, 22.5: 389–407
- . 1995. 'Aspects of Literary Response: A New Questionnaire', *Research in the Teaching of English*, 29.1 (National Council of Teachers of English): 37–58
- Miller, G. A. 1956. 'The Magic Number Seven Plus or Minus Two: Some Limits on Our Capacity for Processing Information', *Psychological Review*, 63: 91–97
- Minsky, Marvin. 1985. *The Society of Mind* (London: Simon & Schuster)
- Nagel, Thomas. 1974. 'What Is It Like to Be a Bat?', *The Philosophical Review*, 83.4: 435–50
- Nanay, Bence. 2018. 'Multimodal Mental Imagery', *Cortex*, The Eye's Mind: Visual Imagination, Neuroscience and the Humanities, 105: 125–34
- Neisser, Ulrik. 1967. *Cognitive Psychology: Classic Edition* (Hove: Psychology Press)
- Neurohr, Benedict. 2019. 'A Predictive Coding Approach to Text World Theory', in *Experiencing Fictional Worlds*, ed. by Benedict Neurohr and Lizzie Stewart-Shaw (Amsterdam: John Benjamins Publishing Company), 15–32
- Neurohr, Benedict, and Lizzie Stewart-Shaw. 2019. *Experiencing Fictional Worlds* (Amsterdam: John Benjamins Publishing Company)
- Nischik, Reingard M. 2009. *Engendering Genre: The Works of Margaret Atwood* (Ottawa: University of Ottawa Press)
- . 2020. 'Myth and Intersections of Myth and Gender in Canadian Culture: Margaret Atwood's Revision of the Odyssey in The Penelopiad', *Zeitschrift Für Anglistik Und Amerikanistik*, 68.3: 251–72
- Norledge, Jessica. 2019. 'Immersive Reading and the Unnatural Text-Worlds of "Dead Fish"', in *Experiencing Fictional Worlds*, ed. by Benedict Neurohr and Lizzie Stewart-Shaw (Amsterdam: John Benjamins Publishing Company), 157–75
- . 2021. 'Modelling an Unethical Mind', in *Style and Reader Response: Minds, Media, Methods*, ed. by Alice Bell, Sam Browse, Alison Gibbons, and David Peplow (Amsterdam: John Benjamins Publishing Company), 43–60
- . 2022. *The Language of Dystopia* (London: Palgrave Macmillan)
- Nuttall, Louise. 2014. 'Constructing a Text World for The Handmaid's Tale', in *Cognitive Grammar in Literature*, ed. by Chloe Harrison, Louise Nuttall, Peter Stockwell, and Wenjuan Yuan (New York: John Benjamins Publishing Company), 83–100

- . 2015. 'Attributing Minds to Vampires in Richard Matheson's *I Am Legend*', *Language and Literature*, 24.1: 23–39
- . 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: London, England): 153–71
- Paivio, Allan, and Csapo Kalman. 1971. 'Short-Term Sequential Memory for Pictures and Words', *Psychonomic Science*, 24.2: 50–51
- Palmer, Alan. 2002. 'The Construction of Fictional Minds', *Narrative*, 10.1: 28–46
- . 2004. *Fictional Minds* (Lincoln and London: University of Nebraska Press)
- . 2005. 'Intermental Thought in the Novel: The Middlemarch Mind', *Style*, 39.4: 427–39
- . 2010. *Social Minds in the Novel* (Columbus: Ohio State University Press)
- Pavel, Thomas G. 1975. "'Possible Worlds" in Literary Semantics', *The Journal of Aesthetics and Art Criticism*, 34.2: 165–76
- van Peer, Willie. 1986. *Stylistics and Psychology: Investigations of Foregrounding* (Abingdon: Routledge)
- Peplow, David. 2011. "'Oh, I've Known a Lot of Irish People": Reading Groups and the Negotiation of Literary Interpretation', *Language and Literature*, 20.4: 295–315
- Peplow, David, and Ronald Carter. 2017. 'Stylistics and Real Readers', in *The Routledge Handbook of Stylistics*, ed. by Michael Burke (Abingdon: Routledge), pp. 458–72
- Peplow, David, Joan Swann, Paola Trimarco, and Sara Whiteley. 2015. *The Discourse of Reading Groups: Integrating Cognitive and Sociocultural Perspectives* (New York: Routledge)
- Peplow, David, and Sara Whiteley. 2021. 'Interpretation in Interaction: On the Dialogic Nature of Response', in *Style and Reader Response*, ed. by Alice Bell, Alison Gibbons, and David Peplow (Amsterdam: John Benjamins Publishing Company), 1–244
- Phelan, James. 2005. *Living to Tell About It: A Rhetoric and Ethics of Character Narration* (New York: Cornell University Press)
- . 2017. 'Reliable, Unreliable, and Deficient Narration: A Rhetorical Account', *Narrative Culture*, 4.1: 89–103

- Pinker, Steven. 1994. *The Language Instinct: The New Science of Language and Mind* (London: Penguin UK)
- Pitt, David. 2022. 'Mental Representation', *The Stanford Encyclopedia of Philosophy (Fall 2022 Edition)*
<https://plato.stanford.edu/archives/fall2022/entries/mental-representation/>> [accessed 21 October 2022]
- Propp, Vladimir Īkovlevich. 1928. *Morphology of the Folktale: Second Edition* (University of Texas Press)
- Pylyshyn, Zenon. 1973. 'What the Mind's Eye Tells the Brain: A Critique of Mental Imagery', *Psychological Bulletin (1) 1973*, 80.1: 1–24
- . 2002. 'Mental Imagery: In Search of a Theory', *Behavioral and Brain Sciences*, 25.2: 157–82
- Rabinowitz, Peter J. 1977. 'Truth in Fiction: A Reexamination of Audiences', *Critical Inquiry*, 4.1: 121–41
- . 2002. 'Reading Beginnings and Endings', in *Narrative Dynamics: Essays on Time, Plot, Closure and Frames*, ed. by Brian Richardson (Columbus: The Ohio State University Press), 300–312
- Radvansky, Gabriel A., and Jeffrey M. Zacks. 2014. *Event Cognition* (Oxford: Oxford University Press)
- Ramírez, Manuela López. 2021. 'Gothic Noir Filmic Male Gaze: Gender Stereotyping in Margaret Atwood's "The Freeze-Dried Groom"', *Ambigua: Revista de Investigaciones Sobre Género y Estudios Culturales*: 119–36
- Rapp, David N., and Richard J. Gerrig. 2006. 'Predilections for Narrative Outcomes: The Impact of Story Contexts and Reader Preferences', *Journal of Memory and Language*, 54.1: 54–67
- Reyna, V. F., and C. J. Brainerd. 1995. 'Fuzzy-Trace Theory: An Interim Synthesis', *Learning and Individual Differences*, Special Issue: Fuzzy-Trace Theory, 7.1: 1–75
- Reyna, Valerie F., and Barbara Kiernan. 1994. 'Development of Gist Versus Verbatim Memory in Sentence Recognition: Effects of Lexical Familiarity, Semantic Content, Encoding Instructions, and Retention Interval.', *Developmental Psychology*, 30.2: 178–91
- Richardson, John T. E., Randall W. Engle, Lynn Hasher, Robert H. Logie, Ellen R. Stoltzfus, Rose T. Zacks. 1996. *Working Memory and Human Cognition* (Oxford, New York: Oxford University Press)
- Robinson, Alan. 2006. 'Alias Laura: Representations of the Past in Margaret Atwood's The Blind Assassin', *The Modern Language Review*, 101.2: 347-59

- Rosch, E. 1978. 'Principles of Categorization', in *Cognition and Categorization*, ed. by Eleanor Rosch and Barbara B. Lloyd (Hillsdale, New Jersey: Erlbaum), 28–49
- Rosch, Eleanor, and Barbara B. Lloyd (eds.). 1978. *Cognition and Categorisation* (Hillsdale, New Jersey: Erlbaum)
- Rosch, Eleanor, and Carolyn B. Mervis. 1975. 'Family Resemblances: Studies in the Internal Structure of Categories', *Cognitive Psychology*, 7.4 (Academic Press): 573–605
- Ross, Catherine Sheldrick. 1980. 'Nancy Drew as Shaman: Atwood's Surfacing', *Canadian Literature*: 7–17
- Roth, Ilona, and Vicki Bruce. 1995. *Perception and Representation: Current Issues* (Buckingham: Open University Press)
- Rumelhart, David E., and Andrew Ortony. 1977. 'The Representation of Knowledge in Memory', in *Schooling and the Acquisition of Knowledge*, ed. by Richard C. Anderson, Rand J. Spiro, and William E. Montague (Abingdon: Routledge), 99–135
- Ryan, Marie-Laure. 1987. 'On the Window Structure of Narrative Discourse', *Semiotica*, 64.1–2
- . 1991. *Possible Worlds, Artificial Intelligence, and Narrative Theory* (Bloomington: Indiana University Press)
- . 1992. 'Possible Worlds in Recent Literary Theory', *Style*, 26.4: 528–53
- . 1999. 'Immersion vs. Interactivity: Virtual Reality and Literary Theory', *SubStance*, 28.2: 110–37
- . 2003. 'Cognitive Maps and the Construction of Narrative Space', in *Narrative Theory and the Cognitive Sciences*, ed. by David Herman (Chicago: The University of Chicago Press), 214–42
- . 2017. 'Why Worlds Now?', in *Revisiting Imaginary Worlds*, ed. by Mark J. P. Wolf (London: Routledge), 3–13
- . 2019. 'From Possible Worlds to Storyworlds', in *Possible Worlds Theory and Contemporary Narratology*, ed. by Alice Bell and Marie-Laure Ryan (Lincoln and London: University of Nebraska Press), 62–87
- . 2022. *A New Anatomy of Storyworlds: What Is, What If, As If* (Columbus: The Ohio State University Press)
- Ryan, Marie-Laure, and Jan-Noël Thon. 2014. *Storyworlds Across Media: Toward a Media-Conscious Narratology* (Lincoln and London: University of Nebraska Press)

- Sadoski, Mark, and Allan Paivio. 2012. *Imagery and Text: A Dual Coding Theory of Reading and Writing*, 2nd edn (New York: Routledge)
- . 2013. *Imagery and Text: A Dual Coding Theory of Reading and Writing* (New York: Taylor and Francis)
- Sanford, Anthony J., and Catherine Emmott. 2012. *Mind, Brain and Narrative* (Cambridge: Cambridge University Press)
- Saussure, Ferdinand de. 1916. *Course in General Linguistics* (New York: Columbia University Press)
- Schank, Roger C., and Robert P. Abelson. 1977. *Scripts, Plans, Goals, and Understanding: An Inquiry into Human Knowledge Structures* (Hillsdale, NJ: L. Erlbaum Associates)
- Schwartz, Alexandra. 2017. 'Yes, "The Handmaid's Tale" Is Feminist', *The New Yorker* <<https://www.newyorker.com/culture/cultural-comment/yes-the-handmaids-tale-is-feminist>> [accessed 11 January 2023]
- Scott, Jeremy. 2014. *Creative Writing and Stylistics: Creative and Critical Approaches* (London: Bloomsbury Publishing)
- . 2016. 'Worlds from Words: Theories of World-Building as Creative Writing Toolbox', in *World Building: Discourse in the Mind*, ed. by Joanna Gavins and Ernestine Lahey (London: Bloomsbury), 127–45
- Semino, Elena. 1993. 'Possible Worlds, Artificial Intelligence and Narrative Theory', *Language and Literature*, 2.2: 146–48
- . 1997. *Language and World Creation in Poems and Other Texts* (New York: Longman)
- . 2001. 'On Readings, Literariness and Schema Theory: A Reply to Jeffries', *Language and Literature*, 10.4: 345–55
- . 2003. 'Possible Worlds and Mental Spaces in Hemingway's "A Very Short Story"', in *Cognitive Poetics in Practice*, ed. by Joanna Gavins and Gerard Steen (London: Routledge), 95–110
- Semino, Elena, and Jonathan Culpeper. 2002. 'Forward', in *Cognitive Stylistics: Language and Cognition in Text Analysis*, ed. by Elena Semino and Jonathan Culpeper (Amsterdam: John Benjamins Publishing Company), ix–xvi
- Semino, Elena, and Mick Short. 2004. *Corpus Stylistics: Speech, Writing and Thought Presentation in a Corpus of English Writing* (Abingdon: Routledge)
- Shea, Nicholas. 2018. *Representation in Cognitive Science* (Oxford: Oxford University Press)

- Shepard, Roger N., and Jacqueline Metzler. 1971. 'Mental Rotation of Three-Dimensional Objects', *Science*, 171.3972: 701–3
- Shklovsky, Viktor. 2017. 'Art as Technique', in *Literary Theory: An Anthology*, 3rd edn, ed. by Julie Rivkin and Michael Ryan (Chichester: John Wiley and Sons)
- Short, Mick. 1996. *Exploring the Language of Poems, Plays and Prose* (Abingdon: Routledge)
- Simpson, Paul. 1993. *Language, Ideology and Point of View* (London: Routledge)
- . 2014. *Stylistics: A Resource Book for Students* (Abingdon: Routledge)
- Smortchkova, Joulia, Krzysztof Dołrega, and Tobias Schlicht. 2020. *What Are Mental Representations?* (Oxford: Oxford University Press)
- Snaith, Helen. 2017. 'Dystopia, Gerontology and the Writing of Margaret Atwood', *Feminist Review*, 116.1: 118–32
- Soames, Scott. 2010. *Philosophy of Language* (New Jersey: Princeton University Press)
- Somacarrera, Pilar. 2006. 'Power Politics: Power and Identity', in *The Cambridge Companion to Margaret Atwood*, ed. by Coral Ann Howells (Cambridge: Cambridge University Press), 43–57
- Sotirova, Violeta. 2006. 'Reader Responses to Narrative Point of View', *Poetics*, 34.2 (North-Holland): 108–33
- Spector, Paul E. 2013. 'Survey Design and Measure Development', in *The Oxford Handbook of Quantitative Methods*, ed. by Todd E. Little (Oxford: Oxford University Press), 170–88
- Staels, Hilde. 1995. *Margaret Atwood's Novels: A Study of Narrative Discourse* (Tübingen: Gulde)
- . 2004. 'Atwood's Specular Narrative: The Blind Assassin', *English Studies: A Journal of English Language and Literature*, 85.2: 147–60
- Staines, David. 2006. 'Margaret Atwood in Her Canadian Context', in *The Cambridge Companion to Margaret Atwood*, ed. by Coral Ann Howells (Cambridge: Cambridge University Press), 14–31
- . 2021. 'Margaret Atwood in Her Canadian Context', in *The Cambridge Companion to Margaret Atwood*, 2nd Edition, ed. by Coral Ann Howells (Cambridge: Cambridge University Press)
- Steen, Gerard, and Marcus Callies. 2011. 'Genre Between the Humanities and the Sciences', in *Bi-Directionality in the Cognitive Sciences* (Amsterdam: John Benjamins Publishing Company), 21–42

- Steen, Gerard J. 1991. 'The Empirical Study of Literary Reading: Methods of Data Collection', *Poetics*, 20.5–6: 559–75
- Stockwell, Peter. 2002. *Cognitive Poetics: An Introduction* (London: Routledge)
- . 2006. 'Language and Literature: Stylistics', in *The Handbook of English Linguistics*, ed. by Bas Aarts and April McMahon (Malden, MA, USA: Blackwell Publishing), 742–58
- . 2007. 'Cognitive Poetics and Literary Theory', *Journal of Literary Theory*, 1.1: 135–52
- . 2009a. *Texture: A Cognitive Aesthetics of Reading* (Edinburgh: Edinburgh University Press)
- . 2009b. 'The Cognitive Poetics of Literary Resonance.', *Language and Cognition*, 1.1: 25–44
- . 2014. *The Poetics of Science Fiction* (Abingdon: Routledge)
- . 2015. 'Cognitive Stylistics', in *The Routledge Handbook of Language and Creativity*, ed. by R. H. Jones (Abingdon: Routledge), 240–52
- . 2019. 'Immersion and Emergence in Children's Literature', in *Experiencing Fictional Worlds*, ed. by Benedict Neurohr and Lizzie Stewart-Shaw (Amsterdam: John Benjamins Publishing Company), 15–32
- . 2021. 'In Defence of Introspection', in *Style and Reader Response: Minds, Media, Methods*, ed. by Alice Bell, Alison Gibbons, and David Peplow (Amsterdam: John Benjamins Publishing Company), 165–78
- . 2022. 'Mind-Modelling Literary Personas', *Journal of Literary Semantics*, 51.2 (De Gruyter Mouton): 131–46
- Stockwell, Peter, and Michaela Mahlberg. 2015. 'Mind-Modelling with Corpus Stylistics in David Copperfield', *Language and Literature*, 24.2: 129–47
- Stockwell, Peter, and Sara Whiteley. 2014. 'Introduction', in *The Cambridge Handbook of Stylistics*, ed. by Peter Stockwell and Whiteley, Sara (Cambridge: Cambridge University Press), 1–10
- Stradling, Fransina. 2019. 'Linguistic Construal and Narrative Empathy in Kate Chopin's *The Story of Hour* (1894)' (PALA Conference Proceedings)
 <<https://www.pala.ac.uk/uploads/2/5/1/0/25105678/2019stradling.pdf>> [accessed 25 October 2022]
- Suin, Darko. 1979. 'Cognition and Estrangement', in *A Twentieth Century Literature Reader: Texts and Debates*, ed. by Suman Gupta and David Johnson (Abingdon: Routledge)

- Swann, Joan, and Daniel Allington. 2009. 'Reading Groups and the Language of Literary Texts: A Case Study in Social Reading', *Language and Literature*, 18.3: 247–64
- Thomas-Corr, Johanna. 2019. 'Margaret Atwood: "She's Ahead of Everyone in the Room"', *The Guardian*
<<https://www.theguardian.com/books/2019/sep/01/margaret-atwood-handmaids-tale-sequel-the-testaments-profile>> [accessed 17 November 2022]
- Todorov, Tzvetan. 1969. *Grammaire Du Décameron* (The Hague: Mouton)
- . 1969. 'Structural Analysis of Narrative', *NOVEL: A Forum on Fiction*, 3.1 (Duke University Press): 70–6
- Tolan, Fiona. 2007. *Margaret Atwood: Feminism and Fiction* (Amsterdam: Rodopi)
- . 2021. *Margaret Atwood's Revision of Classic Texts*, 2nd edn (Cambridge: Cambridge University Press)
- . 2022. *The Fiction of Margaret Atwood* (London: Bloomsbury Publishing)
- Toolan, Michael. 1996. 'Stylistics and Its Discontents; Or, Getting off the Fish "Hook"', in *The Stylistics Reader: From Roman Jakobson to the Present*, ed. by Jean Jacques Weber (London: Arnold: Hodder Headline), 117–35
- Toolan, Michael J. 2013. *Narrative: A Critical Linguistic Introduction* (Abingdon: Routledge)
- Tsur, Reuven. 2002. 'Aspects of Cognitive Poetics', in *Cognitive Stylistics: Language and Cognition in Text Analysis*, ed. by Elena Semino and Jonathan Culpeper (Amsterdam: John Benjamins Publishing Company), 279–318
- . 2003. 'Deixis and Abstractions: Adventures in Space and Time', in *Cognitive Poetics in Practice*, ed. by Joanna Gavins and Gerard Steen (Abingdon: Routledge)
- Turner, Mark. 2003. 'Double-Scope Stories', in *Narrative Theory and the Cognitive Sciences*, ed. by David Herman (Stanford, CA: CSLI Publications), 117–42
- Tversky, Amos, and Itamar Gati. 1978. 'Studies of Similarity', in *Cognition and Categorization*, ed. by Eleanor Rosch and Barbara B. Lloyd (Hillsdale, New Jersey: Erlbaum), 81–98
- Ungerer, Friedrich, and Hans-Jorg Schmid. 2013. *An Introduction to Cognitive Linguistics*, 2nd edn (London: Routledge)
- Van den Broek, Paul, and Mary Gustafson. 1999. 'Comprehension and Memory for Texts: Three Generations of Reading Research', in *Narrative Comprehension, Causality, and Coherence*:

- Essays in Honor of Tom Trabasso, ed. by S. R. Goldmaan, A. C. Graesser, and Paul Van den Broek (Abingdon: Routledge), pp. 15–34
- Van der Bom, Isabelle. 2016. 'Speaker Enactors in Oral Narrative', in *World Building: Discourse in the Mind*, ed. by Joanna Gavins and Ernestine Lahey (London: Bloomsbury), pp. 91–108
- Van Peer, Willie, Frank Hakemulder, and Sonia Zyngier. 2007. *Muses and Measures: Empirical Research Methods for the Humanities* (Cambridge: Cambridge Scholars Publishing)
- Vipond, Douglas, and Russell A. Hunt. 1984. 'Point-Driven Understanding: Pragmatic and Cognitive Dimensions of Literary Reading', *Poetics*, 13.3: 261–77
- Voice, Matt, Chloe Harrison, T Grant, and Marcello Giovanelli. Forthcoming. 'Cognitive Forensic Stylistics: A Cross-Coder Consistency Test for Replicable Feature Finding', *Applied Linguistics*
- Von Eckardt, Barbara. 2012. 'The Representational Theory of Mind', in *The Cambridge Handbook of Cognitive Science*, ed. by Keith Frankish and William Ramsey (Cambridge: Cambridge University Press)
- Wales, Katie. 2014. *A Dictionary of Stylistics* (Abingdon: Routledge)
- Watanabe, Aiko. 2008. 'The Quest for Selfhood through Motherhood: Semiotic Approaches to Atwood's *Surfacing* and Chopin's *The Awakening*', *Bulletin of the Graduate Division of Letters, Arts and Sciences of Waseda University*, 54.1–2: 5
- Werth, Paul. 1993. 'Accommodation and the Myth of Presupposition: The View from Discourse', *Lingua*, 89.1: 39–95
- . 1994. 'Extended Metaphor - A Text-World Account', *Language and Literature*, 3.2: 79–103
- . 1995. 'How to Build a World (In a Lot Less than Six Days, Using Only What's in Your Head)', in *New Essays in Deixis: Discourse, Narrative, Literature*, ed. by Keith Green (Amsterdam: Rodopi), 49–80
- Werth, Paul. 1999. *Text Worlds: Representing Conceptual Space in Discourse* (Harlow, Essex: Pearson Education Limited)
- West, David. 2016. 'Cognitive Stylistics', in *The Bloomsbury Companion to Stylistics*, ed. by Violeta Sotirova (London: Bloomsbury), 109–21
- Whiteley, Sara. 2010. 'Text World Theory and the Emotional Experience of Literary Discourse' (Unpublished PhD Thesis, University of Sheffield)
- . 2011. 'Text World Theory, Real Readers and Emotional Responses to *The Remains of the Day*', *Language and Literature*, 20.1: 23–42

- . 2016. 'Building Resonant Worlds: Experiencing the Text-Worlds of The Unconsoled', in *World Building: Discourse in the Mind*, ed. by Joanna Gavins and Ernestine Lahey (London: Bloomsbury Publishing), 165–82
- Whiteley, Sara, and Patricia Canning. 2017. 'Reader Response Research in Stylistics', *Language and Literature*, 26.2: 71–87
- Wilson, Sharon R. 1993. *Margaret Atwood's Fairy Tale Sexual Politics* (Toronto: ECW Press)
- . 2000. 'Mythological Intertexts in Margaret Atwood's Works', in *Margaret Atwood: Works and Impact*, ed. by Reingard M. Nischik (Rochester, NY: Camden House), 215–28
- . 2002. 'Margaret Atwood and Popular Culture: The Blind Assassin and Other Novels', *The Journal of American Culture*, 25.3/4 (Blackwell Publishing Ltd.): 270-5
- . 2009. 'Fairy Tales, Myths and Magic Photographs in Atwood's The Blind Assassin', in *Once upon a Time: Myth, Fairy Tales and Legends in Margaret Atwood's Writings*, ed. by Sarah A. Appleton (Cambridge: Cambridge Scholars Publishing), 73–93
- Wisker, Gina. 2012. *Margaret Atwood: An Introduction to Critical Views of Her Fiction* (Basingstoke: Palgrave Macmillan)
- Wittgenstein, Ludwig. 1953. *Philosophical Investigations* (Malden MA: Blackwell Publishing Ltd)
- Worthington, Kim L. 1996. *Self as Narrative: Subjectivity and Community in Contemporary Fiction* (Oxford: Clarendon Press)
- Wright, Laura. 2012. 'This Is Border Country': Atwood's Surfacing and Postcolonial Identity', in *Critical Insights: Margaret Atwood*, ed. by J. Brooks Bouson (Ipswich, MA: Sslem Press), 211–29
- Yeari, Menahem, and Paul Van den Broek. 2011. 'A Cognitive Account of Discourse Understanding and Discourse Interpretation: The Landscape Model of Reading', *Discourse Studies*, 13.5: 635–43
- Zeman, Adam , Michaela Dewar, and Sergio Della Sala. 2015. 'Lives Without Imagery - Congenital Aphantasia', *Cortex*: 378–80
- . 2016. 'Reflections on Aphantasia', *Cortex*, 74: 336–37
- Zunshine, Lisa. 2003. 'Theory of Mind and Experimental Representations of Fictional Consciousness', *Narrative*, 11.3: 270–91
- . 2006. *Why We Read Fiction: Theory of Mind and the Novel* (Columbus, OH: Ohio State University Press)

———. 2007. 'Why Jane Austen Was Different, and Why We May Need Cognitive Science to See It', *Style*, 41.3 (JSTOR): 275–98

———. 2015. 'The Secret Life of Fiction', *PMLA*, 130.3: 724–31

Zwaan, R. A., and G. A. Radvansky. 1998. 'Situation Models in Language Comprehension and Memory', *Psychological Bulletin*, 123.2: 162–85

Zwaan, Rolf A., Mark C. Langston, and Arthur C. Graesser. 1995. 'The Construction of Situation Models in Narrative Comprehension: An Event-Indexing Model', *Psychological Science*, 6.5: 292–97