Measuring Moments: Annotating and Quantifying Narrative Time Disruptions in Modernist and Hypertext Fiction

Edward Kearns, B.A., M.Phil.

Supervisors:

Prof. Sean Ryder, School of English and Creative Arts

Dr. Paul Buitelaar, Insight Centre for Data Analytics

School of English and Creative Arts

National University of Ireland Galway

May 2021

Contents

Declaration **1**

Abstract **2**

Acknowledgements **3**

Thesis Introduction **5**

Research questions 5

The field and the knowledge gap 9

Methodology 10

Challenges 12

Outline of chapters 13

1 The Present: Literature Review **15**

1.1 Introduction 15

1.2 Narratology 16

1.2.1 Recent trends in narratology 16

1.2.2 Hypertext fiction, narrative games, and playable stories 18

1.2.3 Space in narrative 20

1.2.4 Back to Cybertext 22

1.2.5 Earlier History 25

1.3 Modernist fiction 27

1.3.1 Definitions of modernism 27

1.3.2 Current critical perspectives 32

1.3.3 Computational analyses of modernist texts 38

1.4 Hypertext fiction 46

1.4.1 Hypertext and print . . . 46
1.4.2 First-generation hypertext fiction . . . 49
1.4.3 Second-generation hypertext criticism . . . 54
1.5 Conclusion . . . 58

2 The Past: Modernist Narrative 61
2.1 Time in Modernist Narrative . . . 61
2.1.1 Bergson, duration, and simultaneity . . . 62
2.1.2 James and Husserl . . . 65
2.1.3 Technology and fiction . . . 67
2.1.4 Clocks, time, and narrative . . . 70
2.2 Anachronies: Analepsis and Prolepsis . . . 77
2.2.1 Anachronies in practice in *The House in Paris* . . . 79
2.2.2 Further examples from *The Sound and the Fury* . . . 82
2.3 Stream of Consciousness . . . 84
2.4 Selection of Modernist Corpus . . . 88
2.5 Conclusion . . . 92

3 Days of Future Past: Hypertext Narrative 94
3.1 Introduction and context: What is hypertext fiction? . . . 94
3.2 Selection of the hypertext fiction corpus . . . 96
3.2.1 *Uncle Roger*, Judy Malloy, 1986 . . . 96
3.2.2 *Victory Garden*, Stuart Moulthrop, 1992 . . . 97
3.2.3 *Twelve Blue*, Michael Joyce, 1996 . . . 98
3.2.4 *my body - a Wunderkammer*, Shelley Jackson, 1997 . . . 98
3.2.5 *The Jew's Daughter*, Judd Morrissey, with contributions from Lori Talley, 2000 . . . 99
3.2.6 *Voyage Into the Unknown*, Roderick Coover, 2008 . . . 99
3.2.7 *Seed*, Joanna Walsh, 2017 . . . 100
3.3 Narrative techniques in hypertext fiction . . . 101
3.3.1 Anachrony . . . 102
3.3.2 Personal narration: focaliser, stream of consciousness, and free indirect discourse . . . 106

3.4 Hypertext fiction as a continuation of modernism . . . 108
3.4.1 Can modernism continue? . . . 111
3.5 Hypertext fiction as postmodern fiction . . . 116
3.6 Conclusion . . . 118

4 Time After Time: Narrative Levels 119
4.1 Introduction: Defining narrative levels . . . 119
4.2 Narrator . . . 120
4.3 Narratee . . . 123
4.4 Focalisation and situation . . . 126
4.5 Different kinds of narrative levels: vertical and horizontal . . . 129
4.6 A complication: narrative levels in dialogue . . . 132
4.7 Narrative levels in modernist novels . . . 137
4.7.1 *To the Lighthouse* . . . 137
4.7.2 *The Sound and the Fury* . . . 142
4.7.3 *The House in Paris* . . . 147
4.7.4 *Pointed Roofs* . . . 148
4.7.5 *Tender is the Night* . . . 150
4.7.6 *Three Lives* . . . 152
4.8 Narrative levels in hypertext fiction . . . 153
4.8.1 *Twelve Blue* . . . 153
4.8.2 *Seed* . . . 155
4.8.3 *Voyage Into the Unknown* . . . 158
4.8.4 *Uncle Roger* . . . 159
4.8.5 *my body - a Wunderkammer* . . . 160
4.8.6 *Victory Garden* . . . 162
4.8.7 *The Jew's Daughter* . . . 164
4.9 Conclusion . . . 165

5 Winding the Watch: Methodology 168
5.1 Introduction . . . 168
5.2 Related work . . . 170
5.2.1 Recent related work . . . 175

5.3 Why XML for this project . . . 178
5.4 Obtaining the text of the corpus . . . 179
5.5 Methodology Part I . . . 180
5.5.1 Inspirations for methodology . . . 181
5.6 Methodology Part II: The XML schema . . . 184
5.6.1 The development and refining of the schema . . . 184
5.6.2 The schema elements and their functions . . . 186
5.6.3 Defining the annotation span . . . 191
5.6.4 The future of the schema . . . 192
5.7 Methodology Part III: Explication of the rest of the methodology . . . 192
5.8 The SANTA project . . . 195
5.8.1 Inter-annotator agreement . . . 196
5.9 Conclusion . . . 197

6 Memory Speaks: Results and Discussion 199

6.1 Introduction . . . 199
6.2 Frequency of analepsis and prolepsis . . . 201
6.3 Proportion of words in analepsis and prolepsis . . . 207
6.4 Further detail on individual texts . . . 217
6.4.1 Modernist novels . . . 217
6.4.2 Hypertexts . . . 248
6.5 Narrative Levels . . . 264
6.5.1 *Seed* . . . 265
6.5.2 *my body - a Wunderkammer* . . . 267
6.5.3 *Voyage into the Unknown* . . . 268
6.5.4 *Twelve Blue* . . . 269
6.5.5 *Tender is the Night*, and other texts . . . 271
6.6 Conclusion: The relationship between modernist and hypertext narratives . . . 272

Thesis Conclusion 274

Research questions addressed, process, and related work . . . 274
Narrative, modernism and hypertext . . . 277
Method and results . . . 282

Future work and conclusion 286

Appendix **288**

Schema in XML 288

Link to annotated corpus 290

Additional tables, complementary to Chapter 6 291

Works Cited **295**

Declaration

I, the candidate, certify that the thesis is all my own work and that I have not obtained a degree in this university or elsewhere on the basis of any of this work.

Abstract

This project outlines a new method of annotating and quantitatively discussing narrative techniques related to time in fiction. Its principal research questions are, firstly, to determine whether a valid and useful system of encoding narrative characteristics related to time in fiction can be developed, and secondly, how the narratives thus encoded can be quantitatively analysed, using modernist and hypertext fiction as case studies. The annotated techniques are analepsis, prolepsis (flashbacks and flashes-forward in story time respectively), narrative levels (stories within stories), stream of consciousness (narration focalised and narrated by a character), and free indirect discourse (narration focalised by a character, but narrated by another entity). By counting the frequency and proportionality of the usage of these techniques, the narrative characteristics of different works from different time periods and genres can be compared. The encoding involves adding tags to text using a markup language, in this case XML with custom tags created for this project. The project combines methods from English literary studies and digital humanities. The results show that analepsis and prolepsis occur more frequently in the hypertexts than in the modernist novels, but there is greater similarity across the whole corpus in the proportions of words spent in analepsis. Seven of the thirteen texts are very similar in their proportion of words spent in the past; they use narrative time disruptions similarly. Between many of the texts there are similarities in the reasons for the disruptive narrative strategies, with representations of subjective experiences of memory requiring the usage of analepsis, which is shown by its frequency and proportion. The process of annotation also enriches the close readings of the primary texts. The annotation itself, as well as the data gleaned from it, is useful and fulfils its aim of adding depth to the analysis of time in these fictions.

Acknowledgements

This project would not have been possible without the financial support of first the Digital Arts and Humanities Scholarship, and then the Irish Research Council. It has been a privilege to spend this time researching a subject I love, and it is not taken for granted.

Enormous thanks are given to my supervisors, Sean Ryder and Paul Buitelaar, for their guidance, feedback, advice, encouragement, and kindness. Our meetings always boosted my confidence that I was working in the right direction.

Furthermore, I thank the members of my graduate research committee, who provided extremely helpful advice every year, in wonderfully cordial and detailed conversations about the work. I am very grateful to Rebecca Barr, John McRae, Adrian Paterson, and Justin Tonra.

Thanks are due to Margaret Kelleher and Marie-Louise Coolahan for their excellent early advice when I was preparing to propose my PhD. Thanks also to Aidan Kane for supporting the application process, and hiring me as a research assistant at NUI Galway in the first place.

For their friendship, collegiality, support, feedback, and wit, huge thanks are given to my friends and colleagues: Síobhra Aiken, Evan Bourke, Eoin Byrne, John Carrigy, Gaby Fletcher, Temmuz Gurbuz, Emer McHugh, Ciara Murphy, Justine Nakase, Eoghan Ryan, John Singleton, and everyone else with whom I shared lunch, coffee, and amazing conversations on the Hardiman Research Building couches.

Great appreciation is given to Seb Bierema, Ashley Cahillane, Hazel Daly, Lydia Kelly, and Ciarán McGuinness for their friendship, kindness, and support. In Naas, huge thanks are given to Shane Bergin, Allan Carey, Róisín Fay, James Fitzpatrick, Sean Halpin, Niall Hederman, John Kennedy, Cormac Lynch, Aoife Meade, Luke Morrin, Rónán Ó Raghallaigh, Eoin Phelan, David Quirke, and Michael Sheridan. Their friendship, humour, and warmth were essential and very much appreciated.

For her unwavering support, encouragement, inspiration, humour, feedback, wisdom, kindness, and love, enormous thanks are given to Máiréad Casey.

Thanks are given to Therese Farrell, Deirdre and Colum Sower, and Paddy and Maighread Kearns, for their kindness, generosity, and love.

Sufficient thanks can never be expressed for the love, support, wisdom, generosity, and encouragement that I have received from Eileen Kearns, Richard Kearns, Rachel Kearns, and Conor DeBarra. Finally, thanks to Belle, for the walks.

Thesis Introduction

Research questions

This is a project about time in fiction. Specifically, it addresses how fiction communicates our experience of time. The experience of time is different for everyone. It is subjective, it is relative. We hold different moments from the past in our minds simultaneously with the present (Bergson 85). We remember things. Sometimes, moments even appear to slow down and speed up. This project is an attempt to investigate the experience of time by quantifying its presence in fictional narratives. In this respect it takes inspiration from structuralism, from that field's endeavours to break a piece of fiction down and determine how its basic structures operate. This project applies a quantitative technique to the subjective representations of time in fiction, while still maintaining the nuance and depth of literary scholarship.

The project's principal research questions are, firstly, to determine whether a valid and useful system of encoding narrative characteristics related to time in fiction can be developed, and secondly, how the narratives thus encoded can be quantitatively analysed, using modernist and hypertext fiction as case studies. Modernist novels can be defined as experimental novels from around the turn of the twentieth century. Hypertext fictions are texts that are made on, and designed to be read on, an electronic device, and which use the hypertext link - the mechanism through which clicking on a word or image brings one to a new page - as a fundamental device in their storytelling. When we discuss *encoding*, or *annotation*, this means adding tags from a markup language to plain text. In this case, that markup language is XML with custom tags created for this project. Throughout this thesis, the terms *encoding* and *annotation* are used synonymously, as they are in computer science work that involves markup. It is acknowledged that *annotation* has a wider definition in the humanities, but this thesis uses it strictly to describe marking up the text digitally with tags. The narrative features which are annotated

using these tags are analepsis, prolepsis (flashbacks and flashes forward in story time respectively, and collectively known as anachrony), narrative levels (stories within stories), stream of consciousness (narration focalised and narrated by a character, with prose designed to replicate thoughts in real time), and free indirect discourse (narration focalised by a character, with a closeness that causes that character's thoughts to influence the words chosen, but narrated by another entity). The annotation is manual, and is all conducted by me, using a custom XML schema - a collection of tags whose usage is defined by a document - which I created. The texts in the corpus are a selection of modernist novels and hypertext fictions. They are:

- **Modernist novels:**
- *The House in Paris* by Elizabeth Bowen, 1935
- *The Sound and the Fury* by William Faulkner, 1929
- *Tender is the Night* by F. Scott Fitzgerald, 1934
- *Pointed Roofs* by Dorothy Richardson, 1915
- *Three Lives* by Gertrude Stein, 1909
- *To the Lighthouse* by Virginia Woolf, 1927
- **Hypertext fictions:**
- *Voyage into the Unknown* by Roderick Coover, 2008
- *my body - a Wunderkammer* by Shelley Jackson, 1997
- *Twelve Blue* by Michael Joyce, 1996
- *Uncle Roger* by Judy Malloy, 1986
- *The Jew's Daughter* by Judd Morrissey with contributions from Lori Talley, 2000
- *Victory Garden* by Stuart Moulthrop, 1992
- *Seed* by Joanna Walsh, 2017

These texts have been chosen in an attempt to represent something of the variety within the respective genres, while still needing to select relatively well-known texts because of the small size of the corpus. The fact that the project uses manual encoding determines that the corpus has to be relatively small. It cannot span an entire genre. Within that constraint, this selection

of texts is intended to comprise a wide range of prose styles, publication dates, gender, and format. These two genres are used as a case study, but this technique could be applied to comparisons of any genres or time periods of fiction, because most of the techniques involved in the annotation scheme have been used in fiction for centuries. The main purpose of the project is to determine whether a useful annotation system can be applied to fiction. The usefulness of the system will be shown in Chapter 6, when it generates points of discussion and analysis of the primary texts. Modernist and hypertext fiction are chosen for this case study because these two genres often share characteristics such as narrative fragmentation, the effort to make a "significant formal break with the traditions that preceded" them (Rettberg 55), while still seeking "inspiration and validation in a literary past" (Pressman 2). They also share a certain "narrative complexity, and an aesthetic of difficulty" (Pressman 9). This project will test whether that similarity is borne out in the data. This thesis does not necessarily prove an influence of one genre over the other, just that there are notable similarities between them that are evident not only thematically and on the surface, but also when their usage of narrative time disruptions is quantified. As we will see, there are not similarities across the entire corpus, and the texts from one genre cannot be said to all behave the same way or bear the same relation to the other genre - it is not so simple - but there are notable similarities between multiple texts across the two genres. There is a strong connection between these modernist texts and hypertext fictions in the way that they narrate time and why they do this; this will be quantified towards the end of the thesis, while the foundational thematic similarities and the similar goals of the genres will be elucidated in the earlier chapters.

Encoding, or annotation, with XML is very useful for comparing the narrative strategies of different texts from different genres. Annotation allows one to pinpoint exactly where the usage of a particular narrative technique occurs, where it begins and ends in a text. That in itself already helps one to think about how a text functions. If one has to think about where to open and close a tag, one is really thinking about where and how the text is using this narrative technique, how the text is working. The annotated text is structured, quantifiable, and searchable, and allows one to ascertain how many words are spent in a technique like analepsis for example, relative to the overall word count of the primary text. One can also determine how frequently the tags are occurring, which in narrative terms means how frequently a text transitions into an analepsis, or an embedded narrative level, or stream-of-consciousness narration, for example.

Quantifying helps us to compare narrative features in a structured way across different texts. Once the texts have been encoded, a number of features are measurable quantitatively, such as (1) the numbers of each of the analepsis, prolepsis, narrative level, stream-of-consciousness and free-indirect-discourse tags in each text; (2) how frequently those tags are occurring relative to a baseline of 10,000 words; (3) the number of words contained within analepsis and prolepsis (the key statistics for the project), both as raw numbers, and more significantly, as proportions of the overall word count of each text.

Of course, there remain obvious differences between the structures of modernist novels and hypertext fictions. Hypertexts generally do not have one linear progression of pages, they are structured in a kind of network. Linear progressions of links and lexias can be found, but on another reading a different path can be taken. This is as opposed to a modernist novel, where even when the narrative is nonlinear, the reader progresses through the same sequence of pages each time.[1] The usage of analepsis can be graphed for a modernist novel based on how much it occurs along the continuum of the page count of that novel. This cannot be done for hypertext fiction. However, the data does allow us to make overall comparisons of how much a hypertext uses, say, analepsis relative to its overall word count, or the word count of a given lexia. As such, the data allows us to make many fruitful comparisons between texts from these two genres. The medium through which one reads a print novel or a hypertext fiction are also different. While medium does matter, this project is focused on the content of a text rather than its medium. It is able to do this because it is focused on narrative. This allows us to compare modernism and hypertext; this project is focused on their narrative content.

Quantifying, counting, and comparing at scale adds another layer of comparison to what could be done with traditional literary techniques alone. It is not abandoning those techniques, it integrates them into the process. This process helps us to spot things that we wouldn't have spotted before. It points us back towards significant places in the text, things that might have been otherwise overlooked. It also adds weight to existing comparisons between the two genres. This method is another tool for the digital humanities toolbox, and it explores the edges of

[1] For the purposes of this thesis, whole-lexia anachronies were encoded based either on the temporal relationship of a lexia to the one that comes numerically before it in a list of the URLs of a hypertext fiction, or, in the absence of that information, based on the temporal relationship of a lexia to the one that came before it upon clicking links in one reading of the text. Multiple reading paths were not explored due to the limited resources of the project.

what digital humanities studies can do, not by making a more complicated automatic natural language processing tool, but by moving more towards the human end of the human-machine relationship, using reasoning to apply judgements that at present only a human can make, and marking those into the text in a way that a computer can search afterwards.

The field and the knowledge gap

This project fills a niche in literary studies and digital humanities that had not yet been explored. Modernist fiction and hypertext literature have been compared thematically but not quantitatively. Chapter 3 will show how literature scholars have identified similarities between the narrative strategies of the two genres. However, the extent of those similarities had not been tested using data gleaned from annotation of those narratives. There have been quantitative studies of modernist fiction - as discussed in Chapter 2 - but they do not specifically explore narrative temporality; they have been more focused on prose style. Narrative levels have been studied quantitatively to an extent, but not in terms of word counts, only in a rough graph as in Schwan et al., which will be discussed further in Chapter 5. Crucially, no project had combined narrative levels with analepsis and prolepsis in as much detail as this project provides, none that addressed word counts and frequency of usage. Annotation schemes have been made for time (TimeML), for some narrative events (ProppML, NarrativeML), and for Narrative Levels (SANTA), but not all together, not in this specific combination, and not in a manner that shows the spans of those phenomena in numbers of words. There is no annotation scheme other than this one that can lead one to calculate the proportion of words in a text spent in analepsis (or another tag). Frequency has also not been explored. All of these things suggest a knowledge gap, both broadly in the kind of issues that the project addresses and in what genres of fiction, and specifically in terms of the annotation and quantitative analysis techniques. This will all be explored in Chapter 1 - the literature review - and Chapter 5 - the methodology, as well as the chapters mentioned above.

This project engages with several fields. Primarily, it is an English literature project, and that is the main context in which it is situated. It uses digital humanities techniques to answer an English literary question. It is greatly indebted to digital humanities and can be considered to be partially inside that field, as a secondary field. Meanwhile, the project takes inspiration from computer science, but cannot be considered a computer science project and does not

pretend to be; it is not a strict experiment in the way that one would be set up in computer science. It cannot be objective, subjectivity plays a large role. However, it remains inspired by that experimental approach, as can be seen in the setup of discussing data, methodology, and results, in sequence. Within English the important touchstones for this project are narratology, modernism, and as the study of electronic literature. Ultimately this project can be classified as digital humanities within the field of English. It answers a literary question using a digital approach.

Methodology

The methodology for this project will be fully detailed in Chapter 5, but for now a summary will be given. The project involves first annotation of the texts in the corpus, and then analysis of that annotated text. XML is used for the annotation because it is flexible, editable, and familiar to me and to others who may want to use the schema. One can make one's own XML schema with custom tags and it can still create a valid XML document. In addition, XML is standardised by the World Wide Web Consortium (or W3C), which ensures its stability as a markup language that will be used widely for years to come. This robustness is another reason to select it for such a project.

The elements (or tags) in the annotation scheme are: Analepsis, Prolepsis, Level (with the attribute 'degree,' to which integers can be assigned for each narrative level), SOC (for stream of consciousness), and FID (for free indirect discourse). Each tag can be used on its own, or nested inside one another. Due to the modular structure of this system, the annotation routine does not have to follow a particular order, and not every tag needs to be used. The tags can be applied as necessary. The criteria for beginning and ending annotation spans is the same for all tags. The annotation should begin at the point in the text where the narrative transitions either to a higher or lower level, a different point in time, or into or out of stream-of-consciousness or free-indirect-discourse narration. This can occur in the middle of a sentence, and can continue into another sentence, paragraph, or chapter. The annotation is ended when the phenomenon ends and the narration changes to a different level, transitions to a different point in time, or changes back to omniscient narration after its spell in more subjective narration has ceased.

Once the texts have been encoded, a number of features are measured quantitatively. The principal measures are proportions of words contained within tags, and the frequency of the tags themselves. Specifically, this methodology measures the numbers of words within the analepsis, prolepsis, narrative level, stream-of-consciousness and free-indirect-discourse tags in each text, both as total numbers and as percentages relative to the total word counts of each text. It also records how frequently those tags are occurring relative to word counts. It is important to have both of these in order to get a complete view of how much and how frequently these narrative techniques are occurring.

The scope and budget of the project does not allow for multiple annotators to be hired; as such all text encoding was completed by one annotator, the author. There is an unavoidable layer of subjectivity because I am the only person doing the annotating. This is mitigated through the use of annotation guidelines, which are included in the appendix of this thesis. Furthermore, the project's schema has been tested for inter-annotator agreement (IAA) using a separate, smaller corpus, and compared against other similar annotation guidelines that focus on narrative levels, as part of the Systematic Analysis of Narrative Texts through Annotation (SANTA) project. Gius et al. explain that SANTA "employed the metric γ (gamma)" so that they could "compare evaluation schemes with different complexities and to avoid favouring more simple schemes (if the scheme is simpler, chance agreement is higher)" (8). The IAA result for my guidelines was 0.24 in gamma (Willand et al. 8). By normal IAA measures, 0.24 is quite low (Mathet et al. 456), but all of the scores in the SANTA project were similarly low. The IAA for my guidelines was the third-highest of the eight annotation guidelines, with results ranging from 0.05 to 0.30. Further rounds of evaluation are pending in that project.

Recording and analysing the proportion and frequency of narrative features related to time allows direct comparisons of the narrative strategies and structures of literary texts from different genres and time periods. We can see how different or similar these texts are in their treatment of narrative time, in a way that is different to what can be achieved with traditional literary analysis alone. However, that literary analysis is also important, and these quantitative measures do not replace that; rather they are used in concert with it, as can be seen in Chapter 6. The analysis of the primary texts is an indelible combination of distant and close reading.

Challenges

There are several challenges encountered during this project. One was the degree of labour involved in the manual annotation of the texts. The lack of multiple annotators unavoidably limits the corpus size of the project. A second challenge arises from the fact that the corpus I chose to begin with is not racially diverse; this is something that I would change if I were starting the project again. This is a problem with the focus of modernist studies generally, and to a lesser extent in studies of hypertext fiction, although both fields are improving in this regard. Mao and Walkowitz brought attention to this problem in *Bad Modernisms*, and have explored the possibilities for the field in *The New Modernist Studies*. Meanwhile, efforts like the non-English language themed recent issues of *Digital Humanities Quarterly* are indicative of changing attention in that field. One exerts power whenever one constructs a corpus; that power should have been used differently in the case of this project. The corpus could have included works from writers such as Nella Larsen, Jean Toomer, Jesse Fauset, Claude McKay, and James Weldon Johnson. While it is true that canons influence the selection of corpora, which then influences the results of the analysis of those corpora, an individual also has agency to resist that canonicity. I selected this corpus, but would do so differently if I were to begin the project again.

Two other challenges arose: firstly, the difficulty of encoding the 'depth' of analepsis and prolepsis i.e., precisely how far back or forward in time the instance of analepsis or prolepsis goes. Unfortunately this cannot be measured reliably. Sometimes the length of time that has been travelled is stated, but usually it is not. If it cannot be measured in the same way for all examples then it cannot be used. Secondly, the use of the past-perfect tense, which can be readily identified by natural language processing, is not a reliable indicator of analepsis - a fact that again points to the project's labour-intensive need for manual annotation. Often analepses are narrated using the same tense as the rest of a text - past or present tense - because the narration has fully transitioned back in time; the events in the analepsis are happening 'now' in narrative time. So the past perfect tense cannot be reliably used to identify instances of analepsis. However, in the future it could potentially be checked against manually-annotated instances of analepsis to check how much of a correlation there actually is.

Outline of chapters

The research questions will be addressed in the following chapters. Chapter 1 is the literature review, and it surveys the current state of the fields of narratology, modernism, and electronic literature studies. Chapter 2 deals with narrative in modernist fiction, from a traditional, literary, narratological perspective. The digital methods come later in the thesis, but first it is important to examine the fictions and techniques featured in the corpus without those tools; to provide context, to complement the digital work, and to show the limits of what traditional methods can achieve on their own. This chapter discusses the usage of the narrative techniques of anachrony and subjective narration in modernist fiction. Furthermore it examines the influence of the science and philosophies of time that were current at the turn of the twentieth century on the narrative strategies employed in fiction. This is a key influence on the rest of the thesis; that the narrative strategies we see in use are used in this way because of evolving attitudes to the perception of time.

The third chapter applies a similar approach to hypertext fiction. The genre is analysed narratologically, with attention paid to anachrony and subjective narration, and how their deployment in hypertext fiction is influenced by the affordances of the hypertext form. This chapter also addresses whether hypertext fiction can conceptually be considered a continuation of modernism. Chapter 4 discusses narrative levels in depth, because that topic is so intricate that it requires the detail provided by its own chapter. The usage of narrative levels is explored across the entire corpus, in both the modernist novels and the hypertext fictions.

We turn to the digital methods in the fifth chapter, which outlines the methodology of the project in detail. It outlines the motivation for the methodology, how it evolved, how it was influenced by related work, how the schema was assembled, how it is applied, and what quantitative measures are used to analyse the data (as stated, these are principally the proportion of words spent inside tags relative to overall word counts of texts, and the normalised frequency of the tags themselves in the texts). Chapter 6 details the results that came from that annotation and quantification process, and what they mean. It assesses the data and uses insights from that data to go back to the primary texts and determine what is behind that data. It discusses how analepsis, prolepsis, narrative levels, stream of consciousness, and free indirect discourse are used in all the texts, based on the figures gleaned from the annotated text. It examines patterns, similarities, and differences. There is not a clear case of one genre using the

narrative time disruption techniques more than the other. Instead what emerges is texts from both genres using those techniques in similar ways, and other texts from across both genres that use them less or are outliers in other ways. In these results we can see that anachrony has been used throughout both genres, separated by decades, and that texts from both genres use it heavily, and this is because those texts are concerned with time and memory thematically. The subject matter has driven the form in a quantifiable way. The fact that the results provide so much material for discussion, that anachronies and other disruptions can be annotated in a way that consistently makes sense across different kinds of texts, which in itself shows the prevalence of the techniques and the similarities in their usage over time, and produces data that can in turn lead to further insights, shows that the annotation project was worthwhile and useful. The conclusion of the thesis draws all of the chapters together, from the context of the various fields involved, to the influence that new ways of thinking about time had on modernist fiction, through more discussions of hypertext and the nature of narrative and of modernism as a literary project, and on to the process and results of the annotation and what that means about the texts in this corpus. Modernism and hypertext are separate genres, but there are many ties that bind them together, none less so than the usage of narrative time disruptions in some of their texts.

Chapter 1

The Present: Literature Review

1.1 Introduction

This literature review will assess the current state of the field of narratology, perspectives on modernism and electronic literature, and recently-proposed uses of computational analysis to study fiction. The purpose of this chapter in the context of the thesis is to provide the background of scholarship which this thesis will build upon with its method. The studies in this chapter analyse narrative experimentation in many different ways, with and without the aid of computational methods. This thesis adds to all of this by introducing a new quantitative method, and using it to show similarities in the strategies of temporal narrative disruption in modernist and hypertext fiction which serve to replicate subjective experiences of time. To set the scene, this chapter will first address narratology, how it has broken into different streams and developed into its current form, and how it is now applied across multiple media. Contemporary work in the leading narratology journals will be assessed, as will the history that has led the field to this point, as the work of Genette in particular remains relevant to this thesis.

The second part of this review will analyse current work on modernist fiction, particularly in areas that relate to narrative characteristics shared by electronic fiction, such as nonlinearity and fragmentation. The influence of medium in modernism will also be discussed. This links to the work of Espen Aarseth, Scott Rettberg, and Jessica Pressman, in connecting modernism to electronic literature in terms of the two genres' styles and structures.

The third section will concern electronic literature. It will discuss hypertext fiction, its history,

the classic works, and more recent experiments in the genre. It will also address other forms of text-based electronic literature from older interactive fiction, to the recent phenomenon of Twitter fiction. This section will also comment on the digital humanities and currently-used techniques for computationally analysing fiction.

1.2 Narratology

1.2.1 Recent trends in narratology

The field of narratology has diversified considerably since its inception in the mid-twentieth century. Narratology is now applied not only to printed fiction, but to many types of narrative in different media, including electronic fiction, film, music, and indeed non-fictional areas such as "conversational storytelling, narrative representations in medical or legal contexts, historiography, news stories . . . and much more" (Fludernik 50). This review will focus on how it applies to experimental fiction narratives, and hypertext in particular, to show how narratology has evolved to account for types of literature that did not exist when the field began.

Narratology's recent transmedial focus was exemplified by the journal *Storyworlds*, which featured analysis of electronic fiction, film, television, comics and computer games. Eileen Herbert-Goodall provides an overview of how digital modes of storytelling have affected narrative in the past thirty years. She writes that information and communications technologies, or ICTs, "are not only affecting reading and publishing practices but also changing how novels are written and designed. This has opened the way for authors to further experiment with the structure, form, and presentation of narrative" (3). She describes this initially in relation to all uses of technology by writers, including programs that allow users "to experiment with space, page layout, and typographical design" (3). Beyond word processors, however, is where creators gain more power for formal experiments that can influence narrative structure. "The ICTs that help to create, distribute, and read electronic hypertexts are pushing reading material into an increasingly process-oriented space in which texts are no longer definitive products restricted to the relatively stable medium of print" (Herbert-Goodall 5). Changing technology has allowed digital fiction writers to create new kinds of texts. Hypertext fiction is one of those.

The process of reading a piece of hypertext fiction is complex when compared with the mechanics of reading a printed book, predominantly due to the unfamiliarity of navigating a text that may

employ any number of hidden or overt tricks in its design (for example, hyperlinks are not explicitly marked in Michael Joyce's *afternoon, a story*; the reader must click around the words to find where the link is). Daniel Punday states that this process of learning how a piece of electronic fiction works is an integral part of the genre, and what distinguishes it from print forms. He writes that "we must understand how a particular hypertext narrative *works* before we will know how to follow its links. The importance of the design of electronic narratives and the reader's need to grasp their rules make such narratives fundamentally different than traditional print stories" ("Narration, Intrigue" 29). Herbert-Goodall discusses the usage of this characteristic in *afternoon*: "readers are compelled to solve a mystery, with progress often frustrated. . . . In order to further pique reader interest, *afternoon* withholds key pieces of information, effectively generating suspense. . . . [The lexia] 'white afternoon' is surrounded by a 'guard field' that prevents readers from accessing it until other lexias have been read" (7-8). This example shows how the medium affects the narrative, how it is used as a device to influence the manner in which a reader progresses through the story.

Espen Aarseth would describe hypertext fiction as having game-like, or *ludic*, qualities. He introduced the term *intrigue* to describe actions by the user that move a game forward, although they do not control the whole game. Intrigue is "a secret plot in which the user is the innocent, but voluntary, target (victim is too strong a term), with an outcome that is not yet decided-or rather with several possible outcomes that depend on various factors, such as the cleverness and experience of the player" (Aarseth 112). Punday extends the idea beyond only the more game-like texts, suggesting that "intrigue is a structure implicit in almost all electronic narratives and that it complements rather than replaces the narration *also* found in these texts. In other words, I argue that these stories have both narration and intrigue, both narrators and intrigants, narratees and intriguees" ("Narration, Intrigue" 26). As the reader is determining how to move through the hypertext, they are performing similar work to follow the intrigue and piece together the story. Just as there are rules to how a hypertext functions, there are also rules to how a printed book functions, and while some novels play with those rules, for the most part readers have internalised the protocol of reading a book page-by-page from start to finish, so much that they do not think about it. This familiarity is not present with a hypertext - works of electronic fiction often have very different rules to each other, requiring the reader to exert "nontrivial effort" (Aarseth 1) to progress through them. The idea that this effort is accompanied by intrigue shows that narratology is evolving, building on its past to address contemporary forms

of storytelling.

1.2.2 Hypertext fiction, narrative games, and playable stories

There is some question over the nature of narrative in hypertext fiction, specifically whether a hypertext can intrinsically have a narrative given its distributed, multilinear form, or whether the narrative is instead constructed in the reader's mind, taking information from the text and rearranging it into a satisfactory order. Marie-Laure Ryan states that

> narrative is a linear, causal sequence of events whose significance depends on their position on a temporal axis, while hypertext is a network of textual fragments that can be read in many different orders. Unless the user's choices are severely restricted, it is highly unlikely that they will produce a sequence that respects narrative logic. This is not to say that it is impossible for hypertext to tell stories; but if readers are to construct a causal sequence of events out of fragments presented in a variable order, they will have to do so by mentally rearranging the fragments into other configurations than the order in which they were initially presented on the screen ("Narrative Games" 44-5).

The mention of restricted choices is important; in most hypertext stories, the reader's choices are restricted to a small number of possible links. As a result, the reader is not randomly jumping from one lexia to any other, they are jumping instead to one of a handful of lexias that the author has decided to link to the current segment. The rationale for that link may be thematic, or the next lexia may feature the same character at a different point in time, or a different character reflecting on a similar but separate experience to that described in the initial lexia. Or the juxtaposition between two seemingly unrelated lexia may function as a kind of Eisensteinian montage, producing a third meaning. In all cases, meanings are generated, and the creator of the hypertext has made links to suggest (but not prescribe) those meanings. The limitation on possible directions through the text (indeed anything short of a literally infinite number of pathways) creates distinct sequences in which information is revealed to the reader. Can this be classed as a narrative in itself, or is the reader always restructuring those fragments of information in their mind in order to create a more linear narrative? And even if the latter were true, is the latent potential for a narrative the same, in effect, as an already existing narrative? Perhaps not, but maybe one can generate a less specific but still emotionally

resonant meaning through association, the accumulation of lexias. The most important reason for non-linear narrative to exist is that the non-linear revelation of information to the reader creates a different meaning, a different effect, than it could have otherwise, for example imitating a repressed memory and the emotional impact when the truth returns. That must be considered a kind of narrative.

The role of the user is key in Ryan's distinction between two different forms of digital narrative. Specifically, the amount of agency granted to a user relative to the rigidity of the narrative structure is what is under discussion. "The combination of narrativity and interactivity oscillates between two forms: the *narrative game*, in which narrative meaning is subordinated to the player's actions, and the *playable story*, in which the player's actions are subordinated to narrative meaning. Or, to put it differently, in a narrative game, story is meant to enhance gameplay, while in a playable story, gameplay is meant to produce a story" (Ryan, "Narrative Games" 45). Under these rules, most mainstream video games that feature a narrative would be categorised as narrative games, because the user does not have much control over the direction of the narrative, even though they have a lot of control over their avatar moment-to-moment. The story has been preordained, and they can merely progress along that path. However, "in a playable story there is no winning or losing: the purpose of the player is not to beat the game, but to observe the evolution of the storyworld" (Ryan, "Narrative Games" 46). Hypertext fiction belongs in this second category, because it has no fail-state or anything to beat, and the reader is not a participant but an observer of the action, and yet they can control what actions happen because they control the order of the narrative, which lexias are selected next and which are ignored, intentionally or not. This is problematised though because there are ultimately still a finite amount of paths that a reader can take through a hypertext - all possible narratives are latent in the text and have been pre-ordained; even if the author hasn't planned every possible outcome, the paths are there. Ryan's distinctions are more useful when addressing texts that blur the boundary between game and story. The kind of hypertext fiction included in this thesis's corpus is undoubtedly narrative fiction. It has narrators, narratees, and usually beginnings and endings. The reader has nominal control but ultimately the narratives are present in the text. This kind of hypertext uses the narrative techniques of anachrony, subjective narration, and changes in diegetic level. These attributes allow it to be compared to modernist fiction.

In hypertext fiction there is usually scope for a large number of reading paths. These affordances

align with some aspects of possible worlds theory (PWT), which has been a part of narratology for decades. "Inspired by Eco's view of the narrative text as 'a machine for producing possible worlds' as well as by models used in artificial intelligence, Ryan (1985, 1991) describes narrative universes - whether fictional or not - as modal systems in which the external (i.e., physical) facts asserted by the narrator play the role of 'textual actual world"' (Ryan, "Possible Worlds" 16). Ryan demonstrates the importance of possible worlds in narrative using the mystery story as an example, where narrative interest is generated through the withholding and subsequent revelation of information; the reader is engaged in imagining the possible directions in which the story could move. Ryan "regards the ability of a narrative to evoke multiple non-actual possible worlds as a major principle of tellability . . . a goal achieved in an unexpected way is narratively more interesting than a goal achieved through the successful execution of a plan, because the unexpected solution contrasts with the anticipated events. In this way, the reader is led to contemplate a richer semantic universe" ("Possible Worlds" 19). This effect is amplified with hypertext fiction, where the reader is not only trying to guess where the narrative will go, but also does not even know what kind of lexia will appear after their next mouse-click. The electronic form provides freedom for increased speculation on possible worlds, as hypertext creates a nonlinear web with multiple possible edges for each node, or lexia. PWT is perhaps more useful to think about conceptually in terms of the reader's experience of hypertext, what they imagine is happening, rather than the actual structure of the text. Ultimately a hypertext fiction has a finite number of lexias and paths. This is not a bad thing; it is instrumental in allowing hypertext to have narrative.

1.2.3 Space in narrative

Space is another prominent area of study in contemporary narratology. Punday outlines the use of narrative space in digital fiction, then recounts some of the larger developments in narratology over the years with respect to print media, then reassesses the former in the light of the latter. He describes the division in a digital fiction between "a primary storytelling space in which gameplay or reading occurs, and an orientating space through which those primary spaces are encountered" (Punday, "Space" 92). This division is evident not only in computer games but also in literary digital fiction. Both feature menus and maps that ostensibly serve to orient the user and delineate the relations between primary spaces, which can be game levels, environments, or hypertext lexia, for example. In a less literal sense, an orientating space

can also be "a thematic or artistic framework for understanding the events in the primary space" (Punday, "Space" 99). For example, Roderick Coover's literary digital fiction *Voyage into the Unknown* "initially (to the left-most) relies on map-like elements (trees, rivers) with more expressive coloring, but as readers move rightward, the space is dominated by images of the landscape against a horizon . . . this orienting space is not meant to be consistent with the spaces implied by the textual passages in any literal way; instead there is a metaphorical and expressive relationship between these two kinds of space" (Punday, "Space" 96). The non-naturalistic visuals provide space for the user to imagine the landscape, rather than claiming a particular reality that might later prove to be false, as we see in the text written from the perspectives of the different narrators. The explorers of the story record many details, but some are shown to be false; their coloniser's perspective affects what they say about the journey. Visual design being a factor in hypertext fiction allows this kind of multiple overlapping representation to occur.

Punday compares these narrative representations of space to earlier analyses of space in printed fiction. He finds some commonality with Ruth Ronen's "central concept of the 'frame' for thinking about narrative space" (Punday,"Space" 99), where a fundamental setting frame is surrounded by other levels of narrative space to create a global structure. That primary space, as in digital narratives, is where the action occurs. Punday then relays Gabriel Zoran's integration of temporality into the discussion. His perspective regarding fields of vision which the reader must reconstruct "eschews simple topographical boundaries, and instead tries to develop a model of space that is sensitive to time and aware that narrative space may not simply map onto concrete, unique locations" (Punday, "Space" 101). Punday uses Herman's work to build upon this, with the idea that "narrative spaces must be understood (in part) through what [Herman] describes as their chronotopic basis: how agents move through space in the course of the story" (Punday, "Space" 102). Punday quotes Herman's explanation that the way to do this is to recognise narratives as "systems of verbal or visual cues prompting their readers to *spatialize* storyworlds into evolving configurations of participants, objects, and places" ("Space" 102). Punday synthesises these approaches to print narratives with an analysis of the digital work "In Absentia" by J.R. Carpenter, which does not behave exactly as the clearly delineated digital texts with which Punday began his discussion. This text uses the Google Maps API for its orientating space; however, while

> the orientation space provided by commercial video games is usually superior to

> that of playable space–giving the player a sense of the overall arc of the game–it is not clear that Google provides the best way to view city space in 'In Absentia.' In fact, it seems that it is precisely the intimate and individual quality of the textually described spaces that Carpenter values. . . . the map provides a way of holding together and giving shape to these individual experiences (Punday, "Space" 106).

Narrative space is being used in a different way to most digital fictions, making the reader work to understand its function and its implications for the meaning of the text. Print narratives can also play with their conventions in order to play with narrative space (for example the many ways that Mark Z. Danielewski's *House of Leaves* experiments with the limits of the printed book in order to portray the extraordinary physics of the house), but this specific usage is afforded by the digital medium, and shows how media affect the abilities of texts to experiment with narrative space as well as time.

1.2.4 Back to Cybertext

The nature of hypertext fiction, its relation to games, and the role of the reader are explored in Espen Aarseth's book *Cybertext*. He discusses what he calls ergodic literature, which is a category for texts with labyrinthine structures that are deliberately difficult for the reader to negotiate. The terms ergodic and cybertext are not synonymous, rather the former is an essential characteristic of the latter. A cybertext does not necessarily have to be digital, but the use of medium is an important part of what defines it, whether that medium is print or digital. Aarseth defines cybertext as focusing "on the mechanical organization of the text, by positing the intricacies of the medium as an integral part of the literary exchange" (1). There is an essential interaction occurring between the reader and the cybertext, creating a feedback loop and requiring the reader's input in order to progress through the narrative. And the reader is always aware of the multilinear nature of the text that they are reading. Aarseth writes that

> when you read from a cybertext, you are constantly reminded of inaccessible strategies and paths not taken, voices not heard. Each decision will make some parts of the text more, and others less, accessible, and you may never know the exact results of your choices; that is, exactly what you missed. This is very different from the ambiguities of a linear text. And inaccessibility, it must be noted, does not imply

ambiguity but, rather, an absence of possibility-an aporia (3).

This resonates with some of our discussion of possible worlds theory. In hypertext fiction, the reader is aware that there are paths not taken, that there are plotlines that they have not encountered yet and may not encounter at all in that particular reading.

There are two main types of labyrinth, for which Aarseth borrows terminology from Penelope Reed Doob: unicursal, which is relatively linear, as there is only one true path, and only one end point; and multicursal, which gives many choices to the protagonist and allows for many outcomes. Umberto Eco suggests a third type, a network, which is more accessible than the other two types as every part of the net is connected to every other part. Aarseth's analysis of cybertext, however, focuses primarily on the first two types. The description of a unicursal narrative might seem odd in the context of a discussion of labyrinths, given that it has only one way for the protagonist to move forward. However, Aarseth cautions against meaning slippage, saying that "we now regard *labyrinthine* and *linear* as incompatible terms . . . the labyrinth no longer denotes linear progress and teleology but only their opposites," yet, "a labyrinth without exit is a labyrinth without entrance; in other words, not a labyrinth at all" (7). He then outlines some examples of unicursal and multicursal works, and explains that some works fit both categories. Italo Calvino's *If on a Winter's Night a Traveler*, while postmodern and highly experimental, is unicursal due to its still relatively linear reading experience. *Hopscotch* by Julio Cortázar on the other hand is multicursal, with many different reading paths available to the reader (two of which are helpfully outlined in the introduction, although arguably only one of these is being truly implied: the more complex path of the two, beginning with chapter 73). A text that is both unicursal and multicursal uses the affordances of its form to present optional alternative paths to the reader. In a printed book a useful example of this is the use of footnotes and endnotes. Aarseth selects *Pale Fire* by Vladimir Nabokov as his example; David Foster Wallace's *Infinite Jest*, published just one year before *Cybertext*, is another fitting example, as is Danielewski's *House of Leaves*, published in 2000. These three texts use footnotes and endnotes variously to divert (or subvert) the narrative, fill in backstories, create framing narratives, and generally provide more elements to their storyworlds. In this sense they align with cybertext's characteristic of using the reader's interaction with the medium to alter the narrative. As Aarseth says, the "differences in teleological orientation - the different ways in which the reader is invited to 'complete' a text - and the texts' various self-manipulating devices are what the concept of cybertext is about" (20).

The definition of interaction is tricky, and Aarseth takes exception to the implication of an intelligent two-way exchange of input (and unless the text uses artificial intelligence, which is admittedly closer to reality now than in 1997, an exchange between a reader and a textual machine cannot be said to be a dialogue with equal input); he also objects to the term *nonlinear*. While the terms nonlinear and nonsequential were used by Theodore Nelson, who invented the term *hypertext*, Aarseth relays the suggestion of George Landow and others to use the terms multilinear and multisequential instead (Aarseth 43).

> The gravest objection to the concept of nonlinear textuality is its implied corollary of *linear* textuality. How can a text be linear? Clearly, the physical properties of the codex is not enough to ensure it, as so many paper experiments (e.g., Queneau 1961) have shown. Furthermore, any book can be opened at any page and can be started at any point. The book form, then, is intrinsically neither linear nor nonlinear but, more precisely, random access (to borrow from computer terminology). The book is well suited to linear discourse but is just as accommodating toward nonlinear discourse, as an encyclopedia or a forking-path story (Aarseth 46).

There is nothing to stop any book from being made to be nonlinear or multilinear; what makes it a cybertext is a narrative that relies on the actions of the reader in order to progress and ultimately convey meaning. The reader is the key functionary in the relationship, and Aarseth links this to semiotics when he quotes Peter Borgh Andersen saying that "an interactive work is a work where the reader can physically change the discourse in a way that is interpretable and produces meaning within the discourse itself. An interactive work is a work where the reader's interaction is an integrated part of the sign production of the work, in which the interaction is an object-sign indicating the same theme as the other signs, not a meta-sign that indicates the signs of the discourse" (Aarseth 49). Again, however, Aarseth prefers terms like "participation, play, or even use" (49) rather than interaction. Connecting to discussions of levels of second-person narration in computer games, Aarseth critiques Andersen's definition for not recognising that "the 'reader's interaction' in a typical adventure game 'indicates the signs of the discourse' as well as the theme, as when the player is searching for a suitable word to complete a command successfully only to be told by the game's 'voice' that it does not understand the word" (Aarseth 49). Through the vertical communication of instructions the reader is not only de-immersed from the storyworld, but a barrier is created to their participation; they are not free to do anything that they can imagine in the game. From this perspective, the genre name of interactive fiction

is a misnomer, but its use persists, and it remains useful in this thesis to refer to stories, games and books that require more input from the reader than the clicking of a link as in hypertext, or the following of a footnote in a book. Any of these kinds of works, however, can potentially be cybertexts, and Aarseth's emphasis on the relationship between reader, medium and narrative is very important in contemporary narratology.

1.2.5 Earlier History

Before Aarseth came several decades of development in the field of narratology. The history of the study of narrative can broadly divided into classical and post-classical narratology. Herman describes the shift from the first period to the second as "expanding the corpus of narratives on which narratological theories have been based, and making adjustments in the theories according to constraints imposed by medium, genre, or communicative situation" ("Storytelling and the Sciences of Mind" 306-7). The post-classical period does not begin with Aarseth, his work is merely a useful centre-point from which to draw developments in perspectives on multilinear fiction over the last twenty years. There is no one place to identify the shift from classical to post-classical; indeed, it is not possible even to identify a single starting point for the classical period. The beginnings are nebulous, with critics in Russia, France, and Germany all developing similar theories at around the same time. It seems that "rather than unfolding along a single timeline, the history of narrative theory has acquired its structure from the distribution of research concerns across parallel developmental trajectories" (Herman, "Histories" 22). We briefly address those parallel trajectories here, in order to develop a fuller grasp on where the field has come from, and so better understand its nature today.

In Germany, inspiration came from advances in the study of anatomy and morphology, specifically the ability to study distinct parts as well as the whole that they make up. "In the domain of narrative poetics, the morphological method was pioneered in Germany in the early years of the twentieth century . . . It was then further developed by Russian Formalist theorists" (Herman, "Histories" 23). In the mid-twentieth century the French structuralists would move beyond Russian Formalism and incorporate ideas from Saussurean linguistics to study narrative as a kind of language, with systems that can be broken down: "researchers like Barthes, Claude Bremond, Gerard Genette, A. J. Greimas, and Todorov followed Saussure's distinction between la langue (language viewed as system) and la parole (individual utterances produced and interpreted on

that basis); they construed particular stories as individual narrative messages supported by a shared semiotic system" (Herman, "Histories" 19). Again, it is important to emphasise that the development of narratology was in no way linear. Both the French and the Russians prioritised the study of stories as types, as general narratives, exemplified by the re-purposing of Propp's *Morphology of the Folktale*. The French structuralists may have been building the classical definition of the field as we know understand it in the mid-twentieth century, but before that the Russian Formalists were pre-empting the diversification of post-classical narratology.

Despite the importance of general models like Propp's, the Russian Formalists endeavoured to expand their purview beyond stories and novels to all kinds of prose in which a narrative could possibly be found. "This widened investigative focus . . . helped uncouple theories of narrative from theories of the novel, shifting scholarly attention from a particular genre of literary writing to all discourse or, in an even broader interpretation, all semiotic activities that can be construed as narratively organized. The Formalists thus set a precedent for the transgeneric and indeed transmedial aspirations of later French structuralist theorists" (Herman, "Histories" 24). Incidentally the use of the word precedent is a rare instance of Herman ascribing a casual link between the work of one national movement to another in his account of the history of narratology. He later provides a useful summary of the approach of the French structuralists in the mid-twentieth century, with particular emphasis on the influence of linguistics: "The aims of narratology were . . . fundamentally taxonomic and descriptive. Structural analysis of stories concerned itself not with *what* narratively organized sign systems mean but rather with *how* they mean, and more specifically with how they mean *as* narratives" (Herman, "Histories" 30). Since the French structuralists, the post-classical era has materialised, encompassing a 'narrative turn' towards analysing narratives across media, whether fictional or not, from spoken word to legal statements. The field has also diversified into subdisciplines that incorporate feminism, psychoanalysis, cultural studies, and postcolonial readings of narrative. We have also, of course, seen the integration of possible worlds theory, cognition, and focus on the effect of media in narratology. The field is now more diverse than ever, which was a necessary step to avoid the binaries and generalisations induced by attempting to apply broad theories of narrative, adopted from quite specific sources, to all fictional narratives. We are now much better equipped to analyse narratives in any medium that do not easily fit into one category or another; a narrative can be unicursal and multicursal, a cybertext even if it is in print, addressing both the authorial audience and the narrative audience. The narratological theories of the past half-century, and in

particular the last twenty years, provide the platform to develop new analyses of experimental fiction that does not conform to linear structural norms, but instead uses its medium and the input of its reader to create multilinear narratives.

1.3 Modernist fiction

1.3.1 Definitions of modernism

This section of the literature review will assess current theoretical perspectives on modernist fiction. It will examine arguments made in the journals *Modernism/Modernity*, *Modernist Cultures*, *Modern Fiction Studies*, and *The Journal of Modern Literature*, and will also use the broad context provided by Michael Levenson and Peter Childs in their books. These books will be contrasted with the more specialised approaches of Shawna Ross and James O'Sullivan in their edited collection *Reading Modernism with Machines*, and of Pressman in *Digital Modernism.* In terms of theory, particular attention will be paid to how current theories on modernist fiction relate to narratology, temporality, and digital studies of modernism.

Before defining what modernism is, this review will identify what modernism is not. Firstly, it is not temporally situated. At least, not directly. Critics select various dates in the late nineteenth century as the beginning of literary modernism, and dates that range from 1930 to the 1950s for its end. However, most acknowledge that there is no true date range for modernism. While the genre does not have distinct temporal boundaries, it is partially a response to a particular set of societal, technological, and environmental conditions, which are measurable by time, giving modernism an indirect grounding in the late nineteenth and early twentieth centuries.

Modernism is also not defined here by a canon, especially not one dominated by men and featuring one of Virginia Woolf or Gertrude Stein as a token woman writer, or sometimes neither of them, as seen in the definition by Malcolm Bradbury, quoted by Peter Childs: "The best focus remains a body of major writers (James, Conrad, Proust, Mann, Gide, Kafka, Svevo, Joyce, Musil, Faulkner in fiction; Strindberg, Pirandello, Wedekind, Brecht in drama; Mallarmé, Yeats, Eliot, Pound, Rilke, Apollinaire, Stevens in poetry)" (Childs 2). It is almost comical that Bradbury could construct a list so long and not include a single woman, but Childs does not even comment on it, he presents the quote without qualification. Childs's book was published in 2000. Elsewhere he discusses women writers at length, but this small detail so early in the

text is difficult to ignore, and is symptomatic of the slow evolution of the modernist canon, with Dorothy Richardson for example only recently getting deserved recognition as an innovator in subjective narration before either Woolf or Joyce had published a novel.

A later piece of Bradbury's definition is somewhat useful, as he states that modernist works are "aesthetically radical, contain striking technical innovation, emphasize spatial or 'fugal' as opposed to chronological form, tend towards ironic modes, and involve a certain 'dehumanization of art"' (Childs 2). We certainly see a de-prioritisation of chronology in the modernist novels in this corpus. These narratives jump between past and present, approaching a closer representation of the subjective experience of time than a chronological narrative would allow, as character and reader alike hold past and present moments in mind simultaneously. Childs's mention of radical aesthetics is initially persuasive, particularly when considered alongside Pressman's identification of the "aesthetic of difficulty" (9) in modernist works. However, modernism cannot be aligned only with a radical, technical style when the spartan prose of Sherwood Anderson and Ernest Hemingway is considered modernist along with the highly experimental styles of Gertrude Stein and James Joyce. Even the latter two authors' styles diverge significantly. There is no one modernist style. For avant-garde prose styles, perhaps the term *high modernism* is useful (although this term is often used to denote a particular time period, after the First World War), but the general term *modernism* is not. A more appropriate definition of modernism might place more emphasis on experimentation with the form of a work as a whole, rather than style on the level of sentences.

Childs discusses modernism as a response to global change at the turn of the twentieth century. He identifies "notions of cultural apocalypse or disaster" (Childs 2) as an influence on modernism, which he characterises as "a literature of not just change but crisis" (Childs 14). This might seem sensational, as it is short-sighted to suggest any particular era of human history as being exceptionally tumultuous; the world has always been turbulent. However, it cannot be denied that the pace of technological change increased at this time (as it has increased ever since), which drove changes in lifestyle for some, particularly in the comfortable social classes from which many of the most notable modernist writers originated. There was not an actual crisis in the world in the early twentieth century, but that does not preclude artists from responding to the perception of one. That perception forced a struggle; it is quite clear is that there was a crisis of representation, requiring a move towards impressionism and away from realism. Childs considers that

> [i]n relation to Modernism, modernity is considered to describe a way of living and of experiencing life which has arisen with the changes wrought by industrialisation, urbanisation and secularisation; its characteristics are disintegration and reformation, fragmentation and rapid change, ephemerality and insecurity. It involves certain new understandings of time and space: speed, mobility, communication, travel, dynamism, chaos and cultural revolution (14-15).

These changes in people's understanding of the physical nature of the world led to changes in their approach to composing art. The new idea of the subjectivity of the experience of time would lead to "a Modernist preoccupation with repetitive, cyclical rather than chronological, teleological time" (Childs 8). Old frames of reference, in considerations of reality and of art, were not as useful as they once were.

The transition towards impressionism as inspired by the world changing in particular ways cannot be recreated, or claimed to be continuing. Modernism was a response to a particular set of conditions, and it would be wrong to carelessly apply that label to works from the present moment that unavoidably respond to a very different context. It is also dangerous to project twenty-first-century reactions to the current rate of technological change back onto the modernists and seek similarities in their response to changes in their own technology. Shawna Ross makes an important point in this regard: "so long as we do not silently attribute to modernism itself our own contemporary revolutionary digital rhetorics of the new. This is the danger of our work, this all-too-satisfying equation of modernists fascinated celebrations and critiques of *their* technological present with our *own*" (2). The modernists had very different ideas about technology than we do, and not always good ideas either.

There are, however, some relevant points of comparison between modernist literature and works produced more recently. Ross qualifies that "[a]ny proposed parallel between any literary period and the contemporary digital culture and scholarship needs to be specified (is this stylistic, political, material, rhetorical, methodological or philosophical?), qualified (acknowledging gaps, errors or hyperbole), and historicized (accounting for both material and discursive change)" (3). In the case of my work, the comparison between modernism and electronic fiction is a formal one, and thematic fascinations with technology are only secondary to, and influenced by, that discussion of form (in discussing whether technology influences form). It is important to keep any such argument for parallels limited. Form is the principal feature in common between

modernism and electronic fiction, as well as the most useful means of defining modernist fiction. The characteristic elements of this form are fragmentation, juxtaposition, and nonlinearity (or multilinearity). These experimental techniques are used to varying degrees in modernist texts, and they are far from the only criteria for defining modernism, but they may be the single most useful one. Style, thematic concerns, and time period must also be considered when defining modernism, but form is most useful. It is also the basis of comparisons with electronic fiction, as this genre also uses "modernist devices of jump, fragment, split perspectives, multiple threads, uncertain causalities, *ecriture labyrinthine*, and so on" (Aarseth 87). Modernism and electronic fiction also both experiment with form while pushing the limits of their respective media. This raises the biggest difference in the two genres' use of form: in modernism, formal experimentation functions as a response to the real world, its changes, and its technology. In electronic literature, formal experimentation is more a response to the changing technology of the medium itself, and the possibilities that it holds.

Modernism's response to the changing world around it, and the crisis of representation that those changes spotlighted, was a new effort to convey the subjective experience of human consciousness. This has been called the impressionist turn, and it is discussed by Michael Levenson in his book *Modernism*. He explains the well-known concept that nineteenth-century fiction was characterised by realism, but that the conditions of the world required new modes of expression in visual art, drama, music, poetry, and narrative fiction. Levenson writes that

> a signal passage in modernist history is the transition from hard-won precision - the word that would mirror the world or express the soul - to the word before, or beyond, the act of reference. This movement of sensibility is also a conceptual shift. It stands in rough parallel to the shift from realism to impressionism, from the world-as-it-is to the world-as-it-appears. As such, it, too, can take on an aspect of skepticism: doubts about the possibility of linguistic reference can correspond to doubts about the objectivity of the world (98).

This skepticism towards objectivity requires the use of subjectivity in narrative instead. The novels of Henry James are an example of this turn in action; while their form still follows novelistic conventions on the surface, the narrative perspective was situated closer to the minds of the characters, and, crucially, this was mirrored this in the prose itself. As the decades passed, this free-indirect-discourse narration would be developed much further by Dorothy Richardson

and Virginia Woolf, and turned into stream-of-consciousness narration by James Joyce and others. Levenson argues that the skepticism that resulted in this subjectivity was at least partly due to the decreasing relevance of religion in the face of science.

> The creators of modernist narrative built fictions that unfolded within a godless universe. In that context, the burdens of subjectivity assume new significance: the extraordinary valuation of consciousness in James can be seen as compensation for the loss of divine sanction. Confronted by 'mere bald facts', the fretful acts of interpretation project meaning and value onto the blank world. In so doing, they offer affirmation on the far side of skepticism - a hope that meaning is within the compass of our talents and our will (Levenson 94).

That hope would ultimately distinguish modernism from postmodernism, which has no such faith in art's ability to provide meaning or truth. Modernism's turn towards subjectivity was also certainly influenced by developments in science itself, such as Einstein's theory of relativity. The turn is not even entirely skeptical, Levenson assures:

> [T]he relinquishing of reference need not appear as skeptical withdrawal. Rather, it might release the fullness of the sign, the plenitude and pleasure that the sign offers, quite apart from the usual labor of meaning. . . . Like Stein, Proust and Joyce, Woolf and Faulkner, and Dorothy Richardson, among others, understood the invention of new plots, new trajectories for human life, as closely tied to experiments with a nonsignifying language. Though connected, plots and words remain in tension: the desire to record new events often strains against the impulse to set language free from the claims of event. (98)

For these writers, a new form was required. "Form inheres in the deepest structures of the work. Joyce's later fiction, like Gertrude Stein's, will imply that narrative must surpass the privilege of character and event and instead enact form - not merely as local felicity but as the achievement of total synthesis, a pattern of the whole." (Levenson 90) Experimental form is the most important characteristic for defining modernism, and some quantitative work has been done to analyse it, but not enough. This thesis seeks to change that, but first we must survey some more current critical work on the thematic concerns that are related to form in modernism.

1.3.2 Current critical perspectives

Conceptions of time and space were changing in the late nineteenth and early twentieth century. Stephen Kern attributes this development to "sweeping changes in technology and culture" (1). He cites new inventions such as the "telephone, wireless telegraph, x-ray, cinema, bicycle, automobile, and airplane" (Kern 1), but also mentions psychoanalysis, which was an influence on stream-of-consciousness narrative, according to Levenson: "the celebrated central technique of therapy - the free associations of the patient - was a spur to narrative experiment." (Levenson 85) This era was also the time when Einstein published his theories of relativity, while philosophers like Henri Bergson and William James interrogated the subjective perception of time.

Much critical writing over the decades has been devoted to analysing the nature of time in modernist fiction. Eveline Kilian gives the subject a contemporary perspective by using queer theory to examine time in Marcel Proust's *À la recherche du temps perdu* and Dorothy Richardson's *Pilgrimage.* The protagonists of both texts are opposed to hegemonic, heteronormative conceptions of time, in which a person's life is defined by stages of childhood, heterosexual marriage and parenthood, and long periods of time are measured in generations, again assuming the regular creation of successive generations. The two protagonists' lifestyles and personalities do not fit this structure, and they each find different ways to achieve "privileged moments in which linear time can be transcended" (Kilian 336), their own queering of time, distinct from the norms of the characters around them. Kilian writes that Miriam Henderson is more consistently successful at breaking away from the generational conception of time than Proust's narrator: "in the *Recherche* queer time only surfaces in isolated moments and does not unfold a sustained impact on the novel, whereas in *Pilgrimage* the female protagonist's moments of being produce a life-sustaining queer energy that permeates the whole text and helps her to withstand the pressure of heteronormativity and explore queer time as a way of being and living and, ultimately, as a mode of writing and reading" (Kilian 336). The example Kilian chooses from Proust occurs in an isolated scene late in the novel sequence, when the narrator speaks to old friends at a party after a long period of absence, and finds that their lives are at a different stage to his own; both they and he have aged, but they have taken on the roles deemed appropriate for their age, while he has not. This jarring realisation for the narrator creates the moment of queer time, as his subjective experience of arrested time is confronted with the

results of time's actual passage. This instance occurs quite late in the narrator's life; earlier he had been immersed in the heteronormative standards of time, and the Paris social scene. It is mostly after his time away that he feels different from the people at the parties in Paris.

In contrast, moments of queer time occur throughout the volumes of *Pilgrimage*. Kilian states:

> *Pilgrimage* is organised chronologically and records moments of heightened intensity experienced by its protagonist from a much earlier age and from the first volume onwards with increasing frequency as the novel progresses. In contrast to the *Recherche*, our attention is not drawn to the guiding hand of the author who retrospectively orders events to give them a coherent shape. Richardson opts for a heterodiegetic narrative that predominantly uses internal focalisation. Thus, unlike Proust, she produces a higher degree of immediacy that gives the reader access to her protagonist's seemingly unmonitored state of mind and avoids the shaping presence of the older self in a homodiegetic, first-person narrative (343).

Miriam Henderson's experience of time is very different to that of the characters around her, and these moments of queer time persist, rather than being isolated in one part of the story. They are an integral part of Miriam Henderson's character, according to Kilian: "recaptured memories defying the flow of time become an integral part of her [Miriam's] process of self-formation and can easily be linked to her struggle with heteronormative expectations" (344). However, there are some similarities in the use of queer time in the two texts, as "both Proust's mémoire involontaire and Richardson's significant moments seem to resist the laws of time by merging present and past and creating a simultaneity of different temporalities in the protagonist's consciousness, and by fully re-presenting, i.e. making present, the experiential reality of an event in the past, thus completely saturating the present and even supplanting it with the past" (Kilian 337). This effect occurs for the reader as well as the character; when the narrative present is taken over by the past, when a moment is stretched, we are swept along with it, following the character's thoughts for however long they perceive them.

Some moments take on particular importance when the narration captures a character's subjective impressions. The experience of those moments distorts the flow of time for the character, and so for the narrative. Kate McLoughlin writes about such moments in the novels of Richardson and Henry James. These are moments of revelation or transcendent meaning, when

a character experiences an epiphany which is not stated explicitly in words. The character thinks about images, which do not reveal meaning on their own. Rather, the reader is able to infer meaning as a result of the contextual information that the reader has accumulated by reading the rest of the novel. This information is remembered implicitly by both the character and the reader, allowing the new image to acquire meaning that it could not have had otherwise. In McLoughlin's argument, the sheer length of the novels of Richardson and James, and the compounded experience of the characters and the reader, are essential for creating the conditions for these specific moments of meaning. For example, in one scene in *The Portrait of a Lady*, Isabel Archer sees, while remaining unseen herself, a moment between her husband Gilbert Osmond and Madame Merle. Isabel sees Gilbert speaking, but then he and Madame Merle simply share an instance of silence, and Isabel immediately understands that there is an unexpected level of intimacy between the two other characters. Both Isabel and the reader process the meaning of this moment without the free-indirect-discourse narrator stating it in words.

> The many bits of information which Isabel has absorbed concerning the relationship between her husband and Madame Merle cohere in this moment to inform her perception. No comment is made on that relationship explicitly. But, as readers, we too have noticed and absorbed the same bits of data over the course of the novel and so we can appreciate Isabel's unarticulated conclusion. Whatever other advantages and disadvantages it may confer, the long novel is a highly appropriate generic vehicle both for fostering and for depicting a species of perception based on memory, resemblance, repetition, and recognition (McLoughlin 305).

McLoughlin states that moments of insight such as this one are only possible due to James and Richardson's novels being long. Both authors

> wrote long novels in response to what they, and others, perceived as a crisis in transferable experience. More specifically, James and Richardson enable the reader to perceive the functioning of this experience by constructing moments of insight to which the works' lengthiness is indispensable. The lengthiness, furthermore, not only makes it possible for the reader to view this experience working in action, but also actually fosters comparable experience in him or her (McLoughlin 300).

Here we see again the mention of crisis with respect to representation in art, in how to convey

a certain impression to the reader. Richardson and James responded to this crisis by using free indirect discourse and building long novels that allow for instances where a character's perception of the present moment is influenced by the memory of many previous moments. The experience derived from a long span of time stretches the current moment, and creates realisation, before the narrative snaps back to a regular flow of time.

Technology has been discussed as an influence on characters' perception of time in fiction. Cedric Van Dijk refers to the opposition between clock-time and the natural time rhythms felt by the body, and mentions industrial capitalism and the First World War as factors in the further influence of rigid clock-based scheduling in people's lives. "The First World War in particular witnessed the imposition of oppressive systems of time on the lives of not only the professional soldier, like Dunn, but also the volunteer and V.A.D. nurse, the conscripted male from the professional classes (from 1916), and, with the introduction of curfews, pub closing hours, and summer time, the civilian" (Van Dijck 165). These are old arguments, so Van Dijk narrows his focus to the influence of one particular piece of technology, the wristwatch. He writes: "If a fragmented view of the nature of time became indeed so central to the modernist aesthetic at a time when the stability of the self was felt to be disintegrating, then not clocks but the watch, an object worn on the body and symbolizing one's individual relationship to time, merits a prominent place in our inquiries into modernism" (Van Dijck 163). The relationship of time to individuals and the family is an important aspect of Virginia Woolf's *To the Lighthouse*. The middle section, 'Time Passes,' brutally surveys the damage that a decade's passing wreaks on the Ramsays' summer home and the Ramsays themselves. Of course, the War plays its role in this, taking the life of Andrew Ramsay, through a landmine explosion. An instant can harbour just as much destruction as many years' worth of decay. In *To the Lighthouse*, "[t]ime is refigured in many, though almost exclusively negative, shapes: as a destructive force that makes for the fact that 'the very stone one kicks with one's boot will outlast Shakespeare;' as History, bringing death and decay; as what is lost and impossible to recover" (Van Dijck 172). The wristwatch influences the novel through its imposition on Mrs Ramsay's experience of time.

> The wristwatch epitomizes Mrs Ramsay's inescapable embodiment of the oppressive pace of modern life: if her mind flows like time, then perhaps her heart ticks like the clock. It is instructive to note in this respect how in the mother's encounter with the watch, the language shifts from a Bergsonian concern with flux and becoming

> (merging and flowing and creating) to the image of rewinding one's spring, which suggests the mechanical rather than the intuitive (Van Dijck 173).

Regimented clock-time infringes on the lives of the characters, and is felt in even the most basic functions of the body.

There was a broader influence of standardised time on public and private life in the early twentieth century. Sascha Bru states that the introduction of Greenwich Mean Time, Fordism and Stakhanovism, accurate train timetables, and communications technology all influenced people's perception of time. He also mentions new developments in clock technology. "For the clock as we now know it, with the sweeping fluid movement of its second hand, was invented only in 1916. This advance introduced the visual representation of time-flow, and as such marked the beginning of the gradual naturalisation of the idea that mechanised time passes as smoothly and organically as natural time itself" (Bru 279). While Van Dijk describes the internalisation of standardised time by some characters in modernism, Bru addresses the resistance to this, and the privileging of personal, subjective time, experienced by other characters.

> The conflict between, on one hand, subjects and bodies keeping their own time, following their own internal or immanent clock, and, on the other, a public system that ran at a different pace - bloodless, without the glitches and changes in tempo characteristic of private life - also took centre-stage in the work of modernist luminaries such as Joseph Conrad, Marcel Proust, James Joyce, Italo Svevo, Virginia Woolf, William Faulkner, and Gertrude Stein. While public time in Proust's *À la recherche du temps perdu*, for example, was found to be all too superficial, in Joyce's *Ulysses* it was, according to Kern, deemed to be arbitrary and ill-suited to order the diverse temporal experiences of life. In all these cases it is the towering power of private, subjective temporality, depicted as resisting the mechanical rhythm of public life, that was made to stand out (Bru 280).

Bru does not close read specific texts, instead framing modernist fiction as a whole with relation to Jamesian philosophy and time in public life, using the influence of Stephen Kern among others. Bru makes the general statement that:

> Modernist writing came to experiment, for example, with various alternative forms to give shape to private temporality. The most evident of these was the introduction of the principle of simultaneity to break up the dominant temporal succession of

> events typical of the nineteenth-century novel. As Mark Currie argues, the novel in general is a presentist genre, since it always already contains all past, present, and future events, thus representing an extended moment. As a narrative device simultaneity was mainly used to juxtapose the memories and perceptions of several different characters, each with their unique, private, and psychological angle in the now (Bru 281).

This focus on simultanaeity is an important characteristic of modernist fiction, with analepsis and prolepsis being used to portray multiple moments being held in the mind of the narrator at once. However, there remains a conflict between Bru's view of subjective, personal time in modernist fiction pushing back against standardised time, and Van Dijk's perspective that in some cases that mechanised, objective time is internalised by characters, because of their relationship to technology. Ultimately Bru's perspective is more persuasive, due to the volume of anachrony that occurs in modernist fiction. Some elements of public time might have been internalised by some characters, but overall modernist fiction portrays different points in time simultaneously so much that it is clear that the simultaneous experience of time has won out. There is no stopping characters and narrators from feeling the simultaneity of moments, and that subjective experience is communicated through the use of anachrony in narration.

If the definition of modernism can be stretched to incorporate somewhat experimental work by Rudyard Kipling, Heather Fielding positions the Kipling short story "Wireless" as an example of the impressionist turn in action. This turn is a response to advances in communications technology; again, a crisis of representation has occurred, and fiction must respond with new forms to truthfully portray the nature and results of modern information-transmissions. The protagonist of "Wireless" begins as an authoritative, nineteenth-century realist narrator, but his perspective is affected by the technology that he encounters - a wireless telegraph in a chemist's shop. Some unexpected events occur, seemingly because of the technology; the chemist's assistant transcribes a Keats poem, despite never having read Keats, implying he must have received the information wirelessly somehow. The new piece of technology, the potential of which is not entirely known to the characters, unsettles the narrator's telling of the events. Early in the story, "the narrator - authoritative and uniquely knowledgeable, abstract and without individuation - is utterly unimpressionist," but as time passes "the story's narration gradually shifts" (Fielding 30). Eventually we see "the full transformation of abstract, authoritative, social knowledge into an uncertain, private consciousness" as "the narrator's experience of time becomes intensively

subjective as a moment turns into an eternity; his position as observer also becomes more particular and less neutral" (Fielding 32). An impressionist turn is happening over the course of this story, and it is a reaction to the new and uncertain influence of the wireless telegraph on human communication and the manner in which we receive and process information about the world around us.

> Kipling links the new kind of narrator who emerges by the end of the story to a new kind of telegraph, anticipating how the figure of telecommunication would be used by later impressionists to make sense of this combination of receptivity and isolation. In explicit terms, the story stages the change in the narrator as his separation into two selves who talk to each other over a telegraphic connection . . . As the scene plays out, it presents the narrator's increasing permeability to the outside world and his alienation from it as specific qualities he shares with, and even learns from, the wireless telegraph (Fielding 34).

A technology specific to the turn of the twentieth century has irrevocably altered the protagonist of Kipling's story, and new technologies would continue to influence true modernist narrative both directly and through changing people's perceptions of time in the western world.

1.3.3 Computational analyses of modernist texts

Woolf

Technology affects the content and form of modernist narratives, but it is also being used now to look back on those narratives and gain new insights. Hammond et al conducted a sentiment polarity analysis of Joyce's *The Dead* and Woolf's *To the Lighthouse*, as well as *The Waste Land* by T.S. Eliot. Their program analysed free indirect discourse in these texts, sorting words into categories that would be used to compare the linguistic styles used by the free-indirect-discourse narration of each character. This was a "signature six-dimensional approach to linguistic style, which employs an automatically created lexical resource to produce human-interpretable 'stylistic profiles"' (Hammond et al 60). They criticise Matthew Jockers's analysis of texts for only confirming previously existing and widely-held critical perspectives on texts, without adding any new revelations, and for being too supportive of jettisoning close reading entirely in favour of distant reading. In contrast, they praise Tanya Clement and Stephen Ram-

say's computational analyses of modernist novels, which will be discussed later in this review. The Hammond group's own linguistic analysis seeks "not to produce definitive, computationally guaranteed readings, but rather to use computational analysis to test, probe and enliven human close readings. Rather than using distant reading to confirm broad critical metanarratives, we seek to establish a feedback loop in which the insights available at the scale of big data are employed to continuously challenge particular close readings" (Hammond et al 53). One of the close readings with which they engage is Erich Auerbach's assertion that *To the Lighthouse* features a "bottom-up, multi-perspectival, multi-voiced conception of reality . . . in which, he argues, 'the writer as narrator of objective facts has almost completely vanished' and 'almost everything stated appears by way of reflection in the consciousness of the dramatis personae"' (Hammond et al 54-5). The authors' analysis explores the results of this free indirect discourse, and reveals notable details about Woolf's novel in comparison to Joyce's short story. Their data indicated that "where Woolf's narrator is consistently flat, detached and objective, Joyce's narrator scores higher values for literary, colloquial, and subjective" (Hammond et al 69). The element of detachment fits Woolf's roving, floating narrative perspective, moving from one character to another, with recognisable differences in style, but still maintaining certain conventions of grammar and sentence structure. Joyce's free indirect discourse (FID) is more likely to be heavily affected by its subject, and use non-standard English. With regard to specific characters, they found that in *The Dead*,

> Gabriel's distinct manner - reserved, given to deep thoughts and literary quotation - emerges clearly in the profile of his FID, which is notably less colloquial, more literary and more abstract than that of other characters. Profiles of Woolf's FID are likewise revealing. Some of the rift between Mr. and Mrs. Ramsay is captured in their style values: Mr. Ramsay, lost in his world of philosophical speculation and scholarly research, is much more abstract, much more literary and far less concrete than Mrs. Ramsay. More interesting in *To the Lighthouse* are the relationships of inter-character influence that the stylistic profiles suggest. Though their style profiles are quite dissimilar, Mr. and Mrs. Ramsay have much more in common with one another stylistically than they do with their children (Hammond et al 69).

This use of computational analysis to highlight the emotional distance between the Ramsay parents and their children is an excellent use of the technology. Other power dynamics in the Ramsay household are visible in the data, with some more noteworthy results: "while *To*

the Lighthouse reproduces conventional power dynamics for class and age, it almost completely reverses them for gender" (Hammond et al 71). Mrs. Ramsay and Lily Briscoe are the dominant minds in the novel, and this is reflected in the prose.

Another computational technique is used by Stephen Ramsay when he analyses characters in another of Woolf's novels, *The Waves*, using their dialogue rather than free indirect discourse. Before describing this study, he notes that even with computational analysis, literary criticism is not science, and should not be claimed as such, despite appearances of objectivity.

> Literary criticism operates within a hermeneutical framework in which the specifically scientific meaning of fact, metric, verification, and evidence simply do not apply. The 'facts' of Woolf - however we choose to construe this term - are not the principal objects of study in literary criticism, and 'evidence' stands as a metaphor for the delicate building blocks of rhetorical persuasion. We 'measure' only to establish webs of interrelation and influence. 'Verification' occurs in a social community of scholars whose agreement or disagreement is almost never put forth without qualification (Ramsay 7).

Once this disclaimer is made, however, computational analysis is useful for literary texts. For his investigation of *The Waves*, Ramsay uses the process of *Tf-idf* to create term frequency lists for the speech of each character. *Tf-idf* stands for term frequency-inverse document frequency, and it sorts the words in a document from most distinctive to least distinctive, relative to the other documents in a corpus. In Ramsay's analysis of *The Waves*, the total speech of each character is a document, and the novel is the corpus. This is made easier by the fact that the vast majority of the novel is told in alternating short soliloquies, without much added description by a third-person narrator. The reason for conducting the analysis comes from a relatively circumscribed literary question about the nature of the prose. Ramsay states that "[s]ome critics have suggested that there are differences that lie along the axis of gender or along a rift separating the more social characters from the more solitary ones, but in the end one has the sense of an overall unity running against the perspectival conceit that frames the narrative" (10). So, the question becomes whether the characters in *The Waves* are "to be understood as six sides of an individual consciousness (six modalities of an idealized Modernist self?), or are we meant to read against the fiction of unity that Woolf has created by having each of these modalities assume the same stylistic voice?" (Ramsay 10). This question of difference in stylistic

voice is particularly relevant in modernist stream-of-consciousness narratives. To address this, Ramsay's term frequency lists essentially treat *The Waves* "as a 'corpus' of separate documents (each speaker's monologue representing a separate document), and use the formula to factor the presence of a word in a particular speaker's vocabulary against the presence of that word in the other speakers' vocabularies" (Ramsay 11). The results showed clear differences in word usage by the six characters that speak. Despite the appearance of unity of style, the speakers' vocabularies are quite different. The sections spoken by Louis reveal that his insecurities about his nationality make themselves evident in his lexicon:

> Few readers of *The Waves* would fail to see some emergence of pattern in this list. Many have noted that Louis seems obsessed with Egypt and the Nile. The list indicates that such terms are indeed distinctive to Louis, but the second most distinctive term in his vocabulary is the word 'western:' Louis is also very conscious of his accent and his nationality (he is Australian; all the other characters are English), and yet the fact that 'accent' is a distinctive term for Louis would seem to indicate that the other characters aren't similarly concerned with the way he talks. Further analysis revealed that only one other character (Neville) mentions it. Louis is likewise the only character in the novel to speak of 'England"' (Ramsay 12).

The data shows phrases in each corpus that reflect either large or nuanced aspects of each character's personality. For example, "For Bernard, the aspiring novelist who some say is modeled on Woolf herself, the top word is 'thinks.' Susan becomes a housewife and frequently invokes the virtues of a pastoral life in the country; nearly every word in her vocabulary seems directly related to the domestic. For Neville, the brilliant unrequited lover of Percival (a mutual friend of all the characters who dies while serving in India), the word 'doomed' is in second place" (Ramsay 12). Studies like this show how quantitative techniques can widen our analysis, and, as a result, enrich our understanding of texts.

Joyce

Focusing just on frequently used words is another quantitative approach that has proved fruitful in analyses of modernist novels. Wayne McKenna and Alexis Antonia examine differences in lists of frequently used words for the three most significant characters in *Ulysses*. While Hammond et al worked on free indirect discourse and Ramsay analysed speech, McKenna and Antonia's

focus is interior monologue in Joyce's novel. They focus not on distinctive words that only one character uses, but on the most basic of words, finding patterns in their usage that provide insights into character. This study was published in 1996 but their hypothesis remains relevant: "[b]y studying the most frequently occurring words of interior monologue in Ulysses, the authors reveal how each main character has a distinctive interior monologue and how the distinctive use of very common words shapes our understanding of each character" (McKenna and Antonia 55). 'Of' and 'from' are some of the basic words that are found to be used quite differently by Bloom, Stephen, and Molly. In this case and in general, the greatest difference in word usage is between Molly and Stephen. Bloom's usage lies between these two extremes, but closer to Molly.

> Stephen, when he is compared with either Molly or Bloom, is most powerfully identified by relatively high frequencies of two words: *from* and *of*. The words that discriminate Molly and Bloom are, in her case, the personal pronouns - *I, he, me, him, we, up* (the adverbial particle), *like* (preposition), *or, could,* and demonstrative *that*; in his case *must, good,* and *now.* A different set of words distinguishes Bloom from Stephen: *that* (demonstrative), *up* (adverbial particle), *way, always, for* (preposition), *could, like* (preposition) and so on. It is clear, though, that in the direct comparison of Stephen and Bloom, Bloom is discriminated by many of the words that also discriminate Molly very strongly (McKenna and Antonia 58).

The differences in the data lead to readings of the differences between the characters. The personal pronoun 'I' is "the statistically most significant discriminator between Molly and Bloom . . . her strong and recurrent assertions of her own opinions contrasting emphatically with Bloom's remarkable avoidance of the first person pronouns" (McKenna and Antonia 62). A related distinction between Molly and Bloom is that she "is much more likely than he to use demonstratives in expressions of moral disapprobation or dislike, and much less likely to use them in a neutral way - consistent with the view that she is more strongly expressive than he is" (McKenna and Antonia 62). The reading of these statistical factors culminates in an opinion on the nature of Bloom's character:

> That sense of Bloom as subjected to others derives also from the presence in his mind of the modal auxiliary *must*, a word that strongly discriminates his interior monologue from that of Molly and Stephen. . . . The prevalence of this word

> in Bloom's thoughts also relates quite often to his attentiveness to others, to his generosity, but also to the extent to which what he does on this day is dictated by others. In many respects he's a passive individual, one not shaping the agenda of his day, but having it shaped for him by others. This suppression of self to external dominance partially explains the paucity of the self-referencing personal pronouns. When Bloom uses *must* he usually drops the subject (thirty-eight of his musts are accompanied by the subject of the verb; sixty omit the subject) (McKenna and Antonia 63).

We see that McKenna and Antonia's aim of using very common words to gain understanding into character is fulfilled. Even in this early study we see valuable insights into modernist writing. More computational analyses of Joyce's work would be published in the following decades, examining the language of the texts to mine details not only about their characters, but about their narrative structure.

Quantitative analysis of language can be used to show the development of a character over time. Jonathan Reeve mines the text of *A Portrait of the Artist as a Young Man* to compare the etymological properties of the words used in the novel with the progression of its narrative. Reeve's hypothesis is that Stephen Dedalus's use of Latinate words will increase over the course of the novel, mirroring his intellectual development. This turns out to be true when the novel is divided into its five chapters - Stephen uses Latinate words more frequently with each successive chapter. The form of the novel and the style of its prose is driven by the development of the character. However, Reeve's results show more nuance in structure, and less of a linear progression, when he divides the novel further into sections within the chapters, delineated by Joyce with rows of asterisks. This analysis reveals that the L scores (for Latinate words), "exhibit much less of a simple progression from low to high. . . . With the exception of Chap. 3, the longest and only five-section chapter, the highest L scores for each chapter come in the first section. The final sections of each chapter are among the lowest in L scores. Seen broadly, there is a pattern here suggestive of what Riquelme calls a 'structural rhythm' - a repeating sawtooth shape" (Reeve 209). Apart from the exception that Reeve mentions, the first section in each chapter has the highest percentage of Latinate words in that chapter - the scores then decrease for each section in the chapter, and increase again in the first section of the next chapter, forming a cycle. While the L scores decrease, the G scores - the frequency of Germanic-based English words - increases towards the end of each chapter. Reeve's argument

is that these cycles mirror, and indeed are caused by, narrative cycles that introduce a problem to be solved at the beginning of each chapter and reach a resolution by the end of the chapter. Resolution is described with more concrete, pragmatic, Germanic words. Reeve describes a cycle of epiphany and anti-epiphany:

> While the epiphany is a 'vision' or 'illusion,' it is followed by an anti-epiphany that 'show[s] Stephen to be increasingly involved with the world' (174). Riquelme calls this oscillation 'a stylistic double helix' and adds that 'Joyce employs the two epiphanic modes of stark realism - 'the vulgarity of speech or of gesture' - and visionary fantasy . . . as delimiting extremes in his character.' These properties - lofty visions and earthly pragmatics - map roughly to properties of L and G registers, respectively (Reeve 211).

The linguistic properties of the text itself shows not only the evolution of the character, but the shape and momentum of the narrative. This shows how quantitative techniques can help us to better understand a text's narrative structure. Specifically, we will see in Chapter 6 of this thesis that on the sentence-to-sentence level, these modernist novels and hypertext fictions disrupt narrative time in ways that are more similar than one may expect given their different forms. Studies like the ones in this section show how literary analyses can be inspired and supported by data. This project uses different data gained from a different process, but is engaging with the same practice of using distant reading to generate arguments in close reading. This projects combination of distant and close reading, with the data leading us to the kinds of literary analyses that are seen in chapter 6, ultimately reveals that temporal disruptions happen to a similar extent in texts from both genres in this corpus, and that they do so because they are obsessed with time and with how narration can mimic subjective human experiences of time. This perspective is only possible because of the encoding and analysis of that encoded text in which this project engages.

Stein

Aspects of narrative structure are also revealed by Tanya Clement's computational analysis of Gertrude Stein's *The Making of Americans*. These insights are particularly noteworthy for disproving a particular critical perspective that the second half of that novel is unstructured chaos - in fact the second half's structure elegantly echoes that of the first half. She rejects

assumptions of indeterminacy in the novel's second half, asserting that "in contrast to critical readings in which *The Making of Americans* is a postmodernist and chaotic text, I posit that it is a mimetic, modernist text that has been misread as indeterminate" (Clement 426). Firstly, Clement finds patterns of repetition in the text that relate to patterns and breaking points in the relationships between several of the characters. The

> push and pull in the narrative mirrors iterative, repetitive, structural patterns in the composition that coincide with these narratives. For instance, Mary Maxworthing and Mabel Linker end their relationship in the pause in the first cycle of repetition; the relationship between Cora Dounor and Miss Charles ends in the middle of the second pause; and the large pause between patterns of repetition (from 11037 to 1722; 276-443) corresponds to Martha Hersland's breakup with her husband Redfern (Clement 434).

Clement relates these cycles of repetition to the halfway point in the novel: the "compositional narrative pairing in which pairing people (in narrative terms) coincides with pairing phrases (in terms of structure) ends at the same point that the traditional narrative is also over. As well, it is at this juncture in reading *The Making of Americans: Being a History of a Family's Progress* that critics traditionally leave off reading and call the project a postmodernist exercise in chaos" (436). A second important part of Clement's analysis is the further identification, using "text analysis and visualisations," of deliberately repeated "identical multiparagraph sections of approximately 500 words, one of which appears in chapter 4 (444), the other in chapter 5 (480) . . . Manuscript evidence supports this discovery; Stein, it appears, knowingly copied this passage from chapter 5 and reinserted it in chapter 4" (436). Clement states further that "with digital analysis and visualizations, I have discovered that the longest repetitions on pages 444 and 480 mark the middle of the text and point toward a dramatic shift in the text's patterns of repetition. With this evidence, I've shown that Stein used longer and less frequent repetitions in the first half of the text and shorter, more frequent repetitions that run across the text as a whole to form the basic structure of the second half of the text" (438). Third, Clement also analyses word usage in Stein's novel compared to a corpus of realist nineteenth-century fiction, finding that the "words *one, living, feeling, being,* and *them* appear with inordinate frequency in *Making* in comparison to how often they appear in the other novels; the words *you* and *said* appear with comparatively greater frequency in the other novels than in *Making*" (441). Clement observes differences in word usage not only between *The Making of Americans* and

the other novels, but also between the first and second halves of Stein's novel. A particularly significant word whose usage changes over the course of the novel is the word 'one.' Clement writes that

> it is impossible to ignore the fact that the word *one* is predominately more common in *Making* and less common in the sample of nineteenth-century texts and is predominately more common in the second than the first half of the text. . . . *One* is not, however, used to create a sense of indeterminacy. Rather, by the end of the novel, Stein increasingly uses the word *one* to represent specific, multiple narrative positions at once. At the point at which the narrator-character drops out of *The Making of Americans*, the word *one* begins to develop its function as a representative of all the multiple narrative agents (441-2).

Something that was once thought to represent indeterminacy in fact has multiple simultaneous meanings, and a body of text that has sometimes been called chaotic is in fact structured to allow for meaningful patterns of repetition.

These studies show that our understanding of modernist texts can be deepened by using quantitative methods. This thesis will offer a different quantitative technique to address different aspects of narrative in modernist and hypertext fiction, particularly those related to time. We have seen that the genre is defined by its depiction of the subjective experiences of its characters. An important aspect of that is capturing the movement of a mind back and forth between memory and the present. This thesis will quantify how modernism and hypertext narratives move back and forth through story time. First some more detail is required on criticism of hypertext fiction; before moving forward we must survey what exists.

1.4 Hypertext fiction

1.4.1 Hypertext and print

Electronic fiction and modernist fiction both developed as reactions. Modernism was a reaction to a crisis of representation, a lack of competence of prevailing forms of fiction to address a changing world and new perspectives on the subjective experience of time. This crisis led to a turn towards impressionism, and the creation of new paradigms in fiction. In contrast, the

development of electronic fiction was driven not by a lack of means of expression, but by the gain of a new medium, one which held latent new paradigms waiting to be realised. The blank slate (or blank CRT screen) needed to be filled; it created the conditions for new forms of expression, rather than the need for new fictions leading to the creation of new conditions.

It should also be noted that some of the narrative strategies used in electronic fiction are not unique to that genre. Electronic fiction is only one point on a long timeline of experimental fiction, stretching into the past far beyond the twentieth century and the modernists, and also forward to the present day with some print novels continuing to attempt new forms, as we see in the work of Mark Z. Danielewski for example. As Katherine Hayles notes, hypertext fiction's use of links is often just a computerised form of the use of a certain familiar apparatus in printed books. "One problem with identifying the hyperlink as electronic literature's distinguishing characteristic was that print texts had long also employed analogous technology in such apparati as footnotes, endnotes, cross-reference, and so on, undermining the claim that the technology was completely novel" (Hayles, *Electronic Fiction* 31). As well as this, nonlinear narratives are, of course, not new in printed books. What distinguishes electronic fiction's narrative techniques, however, is the manner in which the medium allows them to achieve multilinearity and multiple meanings. The number of meanings is still finite though, and they are predetermined; the reader is always moving along a set path, even if it is one of many paths. Hayles identifies this problem, noting that "the reader/user can only follow the links that the author has already scripted. Moreover, in a work like *afternoon: a story*, looping structures are employed from which there is no escape once the reader has fallen into them, short of closing the program and beginning again" (*Electronic Fiction* 31). The next part of Hayles's argument is mostly true, but it may not be likely behaviour for a reader of fiction: "Compared to the flexibility offered by the codex, which allows the reader complete freedom to skip around, go backward as well as forward, and open the book wherever she pleases, the looping structures of electronic hypertexts and the resulting repetition forced on the reader/user make these works by comparison more rather than less coercive" (*Electronic Fiction* 31-2). While a reader certainly can flip backwards and forwards through a book, and this is standard behaviour in, for example, a critical edition featuring endnotes, most readers are unlikely to do this with a novel (except with books like *Infinite Jest*); they follow the reading conventions that a book is usually read from start to finish. They could read out of order and detach themselves from the intended flow of the narrative, but why would they want to do that? It seems that such conventions of reading,

rightly or wrongly built up over a person's lifetime, create a reading path through print novels that is just as coercive as the structures one must follow in a work of hypertext fiction. One is not more restrictive than the other. Hypertext fiction distinguishes itself in other ways.

Hypertext fiction uses its medium and narrative form together to stimulate reflection on the nature of the digital, storytelling, and the communication of information. Stuart Moulthrop's *Victory Garden* uses the confusion created by jumping between lexia to reflect the confusion of the characters as they struggle with accessing information through other media. The form lends itself to a feeling that each moment in the story is impermanent, and transient. It is very difficult for the reader to perceive the story as a whole. The medium itself, and the reader's awareness of it, can also be exploited for story purposes, as in the moment in *Victory Garden* when a bomb falls and an image makes it appear as if the reader's screen has cracked.

The reader is afforded many choices in a hypertext, allowing them to achieve a certain amount of agency in the creation of the story, although choices like this are also available to a reader of a printed nonlinear novel.

> Readers of large bodies of informational hypermedia create the document they read from the informed choices they make. It might appear that such is rarely true of readers of fictional hypertexts who may not know where particular links lead. Nonetheless, the best hyperfictions, I submit, permit the reader to deduce enough basic information, sometimes, as in Michael Joyce's *afternoon*,by retracing their steps, to make informed (thus creative) decisions when they arrive at links. Still, no matter how much power readers have to choose their ways through a hypertext, they never obtain the same degree of power - or have to expend as much effort - as those who write their texts in response to another's (Landow 9).

This focus on the reader's decisions being based on knowledge of what they have read so far is interesting, but we eventually come to Landow's acknowledgement that the reader's power is still limited. This is a softer version of Hayles's argument that a hypertext is particularly coercive. The truth may be somewhere in the middle: the reader has choices, which affect the narrative and its meaning, but those choices are all predetermined.

The pace at which a multilinear narrative can move in a hypertext is significant in distinguishing it from print. Clicking a link is faster than flipping through a book to find a specific page, and one has less grounding in the past. The reader of a hypertext cannot keep a finger marking

one page of a book while they read another. Apart from clicking 'back' or using a bookmark in their web browser or other interface (if this function is offered), the reader of a hypertext must rely on their own memory, which is assimilating new information rapidly as they click to the next lexia. The effect of this rapidity is an increased sense of fragmentation, but with an impressionistic picture of the story that accumulates from those fragments. Vannevar Bush thought that this kind of constant intake of new information, connected by association, was similar to how the human mind works generally. Landow quotes Bush as saying that "With one fact or idea 'in its grasp,' the mind 'snaps instantly to the next that is suggested by the association of thoughts, in accordance with some intricate web of trails carried by the cells of the brain"' (Landow 10). The human mind does not always think in straight lines, so the nonlinearity and multiplicity offered by hypertext is useful. It amplifies the effect of footnotes, endnotes and cross-referencing in print, allowing for links that can go to several other lexia, or can return the reader to the previous lexia. Landow identifies as many as twelve different categories of hyperlinks based on how they are made, and what directions they can go. As well as providing more options for meaning-making for writer and reader, hypertext also departs from a rigidly defined notion of one central text. "According to Bush and Nelson, then, one of the greatest strengths of hypertext lies in its capacity of permitting users to find, create, and follow multiple conceptual structures in the same body of information. Essentially, they describe the technological means of achieving Derrida's concept of decentering" (Landow 10). The text becomes potentially different for each reader, as they make different choices of which links to follow. This degree of multiplicity is one of the most significant factors that separates hypertext fiction from print fiction.

1.4.2 First-generation hypertext fiction

The concept of hypertext began with Vannevar Bush, but that was all it was at the time; a concept. Bush wrote 'As We May Think' in 1945, when computers existed but hypertext was still decades away from realisation. It would take until the 1960s for the idea to be refined into something that could actually work on a computer (and for Ted Nelson to coin the term *hypertext*). Development through the 1970s and 80s led to many hypertext languages, preceding the arrival of HTML in 1993. Electronic literature in general can be traced back to the 1950s, with experiments in computer-generated poetry such as Theo Lutz's 'Stochastic Texts' in 1959. Sheldon Klein created some computer-generated narrative fiction in 1973. The first major

developments in hypertext fiction, however, were in the 1980s. Hayles categorises this period up to 1995 as the first generation of electronic literature (*Electronic Fiction* 7). The canonical Storyspace works which are almost always referred to as the most significant of the period are Michael Joyce's *afternoon, a story* from 1987, Stuart Moulthrop's *Victory Garden* from 1992, and Shelley Jackson's *Patchwork Girl* in 1995. Hayles considers the second generation of electronic literature to be defined by their "fuller use of the multimodal capabilities of the Web" (*Electronic Fiction* 6); the beginning of the second generation, 1995, was the year when the world wide web was launched. The development of electronic literature into its second generation appears to have been driven at least in part by the new programming tools that were available for the production of texts. Hayles writes:

> As the technology changed, and especially as the Web grew in size, scope, and functionality, writers began to move away from the Storyspace interface to explore the rich diversity of interfaces available in such commercial software packages as Flash, Shockwave, and Dreamweaver and also XTML, VRML, DirectX, and other web-oriented languages. A new breed of second-generation electronic literature began to appear that looked very different from its predecessors, experimenting with ways to incorporate narrative with sound, motion, animation, and other software functionalities (Hayles, *Writing Machines* 27).

The problem is that many of these technologies which served as the media for second-generation electronic literature - most notably Flash and Shockwave - are now obsolete. HTML5 has replaced Flash as the main platform for video content on the web; YouTube changed from using Flash to HTML5 in 2015, Adobe ceased supporting Flash in 2020, and at the end of that year, Google Chrome stopped supporting it as well. The platform most associated with the first generation of electronic literature, Storyspace, is also something of a relic. While its current incarnation, Storyspace 3, is still supported by Eastgate Systems (although only on Mac), authors like Shelley Jackson were switching to HTML in the mid-90s. Storyspace, like Flash, gave authors an easy-to-use graphical interface so that they did not have to write code. In 2021, Twine provides an equally user-friendly but much more flexible platform for creating ludic fictions. It still has a graphical interface, but it is open-source, it runs on PCs, Macs and Linux machines, and it publishes as HTML for integration with existing websites. Twine will run its course, and HTML eventually will too, but for the moment it endures.

As electronic fiction evolved from its first to its second generation, critical perspectives on hypertext also changed. Hayles identifies Aarseth's book *Cybertext* as the turning point in this regard. She writes that Aarseth's typology of semiotic variables for cybertexts "is undoubtedly more appropriate to second-generation electronic literature than earlier hypertext theory, which now began to appear dated and provincial compared to Aarseth's flexible and theoretically powerful approach. Meanwhile, other critics and writers who continue to be interested in linking have developed theoretically sophisticated ways to talk about hypertext that move considerably beyond the first generation of hypertext theorists" (Hayles, *Writing Machines* 28). Much early hypertext criticism was written by the same people who created notable hypertext fictions, and the computer programs that ran them; Stuart Moulthrop, Michael Joyce, Jay David Bolter, and J. Yellowlees Douglas were all practitioners as well as critics. Moulthrop wrote with some optimism about hypertext in its early years. This may be why that criticism seems dated now, as the internet in general has left behind the utopian ideals of Ted Nelson and become dominated by corporations. It was Nelson's optimism that Moulthrop discussed in 1991, saying that Nelson's proposed Xanadu hypertext system (something similar to the web) "invalidates technological abjection, advancing an unabashedly millenarian vision of technological renaissance in which the system shall set us free," a system that would be "a practical attempt to reconfigure literate culture" (Moulthrop). Moulthrop also referred to more measured predictions for hypertext's positive effects. He noted that "Bolter (1991), Drexler (1987), McCorduck (1985), and Zuboff (1988) all contend that postmodern modes of communication (electronic writing, computer networks, text-linking systems) can destabilize social hierarchies and promote broader definitions of authority in the informational workplace" (Moulthrop). He went on to make an interesting point that undermines the link between postmodernity and hypertext. This also narrows the focus from hypertext (or the web that would come later) generally, to hypertext fiction. Moulthrop's point is that hypertext fiction, while incorporating postmodern elements such as enabling multiple meanings to co-exist and giving the reader choices, actually undermines the postmodern idea of the death of the author. The reader's awareness of the choices available to them also makes them aware of the constraints on those choices, and this in turn leads them to think of the reason for those constraints: the fact that the text was created by a human (or humans), who set the limits for what directions the narrative could take. In Moulthrop's words:

> [e]arly experience with hypertext narrative suggests that its readers may actually be

> more concerned with prior authority and design than readers of conventional writing. The apparent 'quickliming of the author' does not dispel the aura of intention in hypertext (Douglas 100). The constantly repeated ritual of interaction, with its reminder of discursive alternatives, reveals the text as a made thing, not monologic perhaps but hardly indeterminate. The text gestures toward openness - what options can you imagine? - but then it forecloses: some options are available but not others, and someone clearly has done the defining. The author persists, undead presence in the literary machine, the inevitable Hand that turns the time (Moulthrop).

For every link a reader selects, they are also aware of the links they are not choosing, the plot threads they are not reading. This awareness of metanarrative is a similarity between hypertext and modernism. If a postmodern text is often a chaotic mix of untrustworthy authority, in a modernist or hypertext fiction there is very much an 'arranger' at work, forging the allusions in the text.

In Moulthrop's paper, Nelson's optimism about new technology's power to completely change the way we work (a utopian vision not wholly unlike the faith in superstructures, and in technology, held by some modernists) is tempered with the more measured, even pessimistic, outlook of William Gibson. The root of the difference in their perspectives is the question of who controls the hypertext systems that we use. Moulthrop writes that "Cyberspace as Gibson and others define it is a Cartesian territory where scientists of control define boundaries and power lines" (Moulthrop). He also refers to "Gibson's dark dream" as "a realization of McLuhan's prophecy of reversal, an empowering technology turned into a mechanism of co-option and enslavement" (Moulthrop). This dramatic phrasing is still closer to describing what the world wide web has become than Nelson's hopeful predictions. Nelson's "Xanadu model lets us conceive instead a decentered space of literacy and empowerment where each subject acts as *kybernos*, steering her way across the intertextual sea." (Moulthrop) In this conception of a hypertext network, "we find not consensual illusion but genuine, negotiated consensus. The pathways and connections among texts would be created on demand" (Moulthrop). The world wide web as we now know it is not like this. Rather than negotiated consensus we have fractured debates; instead of a big tent, an ever-growing collection of isolated encampments where one need not hear the voices of those with whom one disagrees. One can find a specialised group of subreddits, Twitter accounts and 'news' websites to follow, and through these channels only receive reinforcement of one's entrenched worldview. The web as a whole is not controlled by its users. This is not a

free, utopian platform; much like in a hypertext novel, many of the connections and decisions have already been made for us.

To return more specifically to hypertext fiction, Moulthrop notes an important difference between hypertext and printed text that may behave like hypertext:

> Hypertext systems exploit the interactive potential of computers to reconstruct text not as a fixed series of symbols, but as a variable-access database in which any discursive unit may possess multiple vectors of association . . . Because it is no longer book-bounded, hypertextual discourse may be modified at will as reader/writers forge new links within and among documents. Potentially this collectivity of linked text, which Nelson calls the "docuverse," can expand without limit (Moulthrop).

A non-linear book that allows the reader to make choices about the direction of their reading is limited by the practicalities of book production and the author's imagination (unless the reader physically adds pages to the book, which would be an interesting concept, particularly if it were encouraged by the author). In Moulthrop's conception of hypertext, the multiplicity of links that can be created to and from each lexia distinguishes the platform from print. Unrestricted by the physical dimensions of a book, the author can create many more reading paths and links (although, at the peak of hypertext fiction's popularity, they would still have had to work within the storage limits of floppy disks and CD-ROMs). The predictive leap that Moulthrop makes is that in a hypertext, the reader would have the power to generate their own links and annotations. With fiction, this did not come to pass. Even later electronic texts disseminated through social media, a platform that would seem to encourage author-reader interaction, did not usually do this, at least not in the most publicised cases, such as the Twitter fictions written by Jennifer Egan and David Mitchell. These stories were in fact far less interactive than the most significant hypertexts - the seemingly canonical works by Jackson, Joyce, and Moulthrop, and the hypertexts that have been selected for the three volumes of the Electronic Literature Collection - the content of which is still exclusively created by the author. They write the words, and they make the hyperlinks. The reader only chooses which order they click them in, which is still powerful, but very much not the collaborative scenario that Moulthrop described in 1991. This remains an interesting hypothetical difference between hypertext and print fiction, even if it is only an abstract possibility of endless expansion of the narrative, because the reader and creator are both aware of that abstract possibility. However, the attribution of importance

to linking in hypertext beyond all other formal features is something that later generations of hypertext critics would problematise.

1.4.3 Second-generation hypertext criticism

As hypertext fiction itself evolved over time, so did the criticism surrounding it. Two articles by Robert Coover, one from 1992 and one from 1999, provide a useful perspective of the evolution from the first to the second generation of hypertext criticism. In the 1992 piece, with the typically first-generation provocative title 'The End of Books,' Coover shows the excitement of a critic grappling with a new form: "With hypertext we focus, both as writers and as readers, on structure as much as on prose, for we are made aware suddenly of the shapes of narratives that are often hidden in print stories. The most radical new element that comes to the fore in hypertext is the system of multidirectional and often labyrinthine linkages we are invited or obliged to create" ("The End of Books"). The link is still new and a source of fascination all by itself. Critics accustomed to thinking about the structure of works of fiction now must regard structure in a different way. It can overwhelm other concerns, both in the criticism and in the text; if structure becomes all, and that structure is nonlinear, it becomes more difficult to account for character development or plot arcs. Coover notes this when he writes that "the creative imagination often becomes more preoccupied with linkage, routing and mapping than with statement or style, or with what we would call character or plot (two traditional narrative elements that are decidedly in jeopardy)" ("The End of Books"). In hindsight we can see that this jeopardy is overstated, because in most fiction character and plot are used as much as ever, and hypertext fiction never became popular in the mainstream. If traditional narratives were ever placed in jeopardy, it was long before the advent of hypertext; the experimental plot-eschewing narratives of modernism were far more widely read.

Later in the 1992 piece, Coover discusses fragmentation. Claiming to speak for all readers, he says that he is "always astonished to discover how much of the reading and writing experience occurs in the interstices and trajectories between text fragments. That is to say, the text fragments are like stepping stones, there for our safety, but the real current of the narratives runs between them" (Coover, "The End of Books"). He reveals the first-generation-of-hypertext fascination with structure and the link. It is easy now to see the overestimation of the importance of hypertext fiction and its form, but even as we say not to allow fascination with the hyperlink to

obscure other criticism, it remains true that fragmentation is an important part of hypertext, its narratives, and the way it disrupts traditional forms of narrative. Fragmentation relates hypertext fiction to modernism; the hyperlink distinguishes it.

Coover raises some pertinent questions about narrative in hypertext, but does not answer them, such as how one is supposed to "judge, analyze, write about a work that never reads the same way twice?" ("The End of Books"). He wonders "what of narrative flow? There is still movement, but in hyperspace's dimensionless infinity, it is more like endless expansion ; it runs the risk of being so distended and slackly driven as to lose its centripetal force, to give way to a kind of static low-charged lyricism" (Coover, "The End of Books"). He clearly does believe that some kind of narrative is occurring though, as he notes in the 1999 piece that hypertext enabled narratives that functioned in ways similar to human memory, and allowed writers and readers of hypertext "to read and write in the way that we think, creating and/or accessing the various elements of a narrative the way one accesses the fragments of one's life story held in memory, say, or the way that one backpacks through a strange country, making hypertext not the latest fantasy tool, but a kind of neorealism" (Coover, "Literary Hypertext"). In the final analogy we again see the use of physical space as a way to describe hypertext. The construction of the analogy also betrays some lingering romanticism about hypertext.

However, Coover had realised by 1999 that this kind of narrative, and his his original conception of hypertext, was not current in electronic literature anymore. He notes that:

> for hyperfiction, the old golden age webworks of text have largely vanished, hypertext now used more to access hypermedia as enhancements for more or less linear narratives, when it's not launching the reader out into the mazy outer space of the World Wide Web, never to be seen again. Notions of architecture, mapping, design: mostly gone. Genuine interactivity, too: the reader is commonly obliged now to enter the media-rich but ineluctable flow as directed by the author or authors: in a sense, it's back to the movies again, that most passive and imperious of forms (Coover, "Literary Hypertext").

In 2001 the peak years for hypertext fiction have long since passed, and at this time Jay David Bolter argues that the voice of a piece of writing is fragmented by the form of hypertext. He quotes Michael Heim's idea that "the trails and intricate pathways of 'hypertext,' as Ted Nelson terms it, all these advance the disintegration of the centering voice of contemplative thought'

(p. 220). An electronic text may fracture the single voice of the printed text and speak in different registers to different readers. . . . In the ideal, if not in practice, an electronic text can tailor itself to each reader's needs, and the reader can make choices in the very act of reading" (Bolter). This refers not only to the fragmentation of an author's voice, or the sacrificing of a unity of style (because these things have been achieved in printed fiction), but to the disintegration of a central idea or argument, as a result of the nonlinearity of hypertext. However, again, the fact that an arranger has created the links undermines Heim and Bolter's idea, at least in fictional works. Unity is maintained even in this fragmented state because of the gradual accumulation of thematic resonance that reading a hypertext causes.

Each reader may experience a different unified meaning. Bolter identifies this and relates it to the idea of the canon of Western literature when he writes that:

> hypertextual writing . . . can change for each reader and with each reading. Authors can exploit the dynamic quality of hypertext to alter the nature of an audience's shared experience in reading. If all the readers of *Bleak House* or *Ulysses* could discuss these works on the assumption that they had all read the same words, no two readers of a hyperfiction can make that assumption. They can only assume that they have travelled in the same textual network. . . . cultural unity through a shared literary inheritance, which has received so many assaults in the 20th century, must now suffer further by the introduction of new forms of highly individualized writing and reading (Bolter).

This argument does not acknowledge that it could be a good thing to dismantle that cultural unity, that a shared literary inheritance can never represent all of the readers who are supposed to inherit it, and that reading different things, or consuming the same works in different ways and contexts, enrich the discussions that are possible about those works, and allow for more works to be included in those discussions.

Hypertextual fragmentation is not a bad thing. Bolter notes that it

> need not imply mere disintegration . . . Elements in the electronic writing space need not be simply chaotic; they may instead function in a perpetual state of reorganization, forming patterns that are in constant danger of breaking down and recombining. This tension may lead to a definition of effective writing that supplements or replaces our traditional notion of the unity of voice and of analytic

> argument. What unity there is in an electronic text derives from the perpetually shifting relationship among its verbal elements (Bolter).

This resolves his earlier point about the disintegration of a unified voice, as well as getting closer to Coover's argument about the formal advantages of hypertext over print. These new patterns are only possible in an electronic text.

There have been some relatively recent, formal criticisms of 1990s hypertexts, combined with cultural criticism. In a paper from 2011, Paul Hackman applies a feminist perspective to an analysis of the hypertext form of Shelley Jackson's *Patchwork Girl*. Like Bolter and Coover before him, he acknowledges that hypertext fiction did not achieve the popularity that was predicted for it, noting that "fifteen years after the first generation of hypertext novels emerged, hypertext literature remains on the fringe of literary studies. The relationship between print and digital media has indeed grown more complicated, as people do more and more reading on their computer screens, but many of the ballyhooed features of early hypertext novels remain restricted to experimental works" (Hackman 85). Hackman explains how hypertext is a useful medium for making feminist arguments, as well as implications about the relationship between print and hypertext: "Jackson's text combines print and hypertext in order to posit a more complicated relationship between the two media - a relationship that leads to a more complex vision of female subjectivity than one attached to hypertext alone" (85-6). He relates this subjectivity to the representation of the body and the use of textual and visual collage in the text: "the texts that Jackson breaks apart and merges together connect feminist concerns about the construction of female bodies to the act of creating a hypertext. . . . Though 'a quilt' seems to be the one section that is separate from the patchwork girl's story, the patchwork girl often refers to herself as the chain of hypertext links that each reader creates, so this patchwork of secondary sources becomes a graphical representation of her stitched-together body" (Hackman 91).

Patchwork Girl does not completely conform to linear or multilinear narratives, but instead makes space for both, and in doing so enters a conversation with print, rather than starting a monologue all on its own. Hackman writes that "the story of the creature's travels is largely linear," and that "the narrative settles into a long sequence of lexias, each with only one possible link. From 'birth,' the reader has multiple options for abandoning the promised history of the patchwork girl and instead freely exploring other sections of the hypertext, though each of these

options leads to further discussion of the necessity of both print and hypertext to the birth of the text. If one wants to learn the story of the patchwork girl, however, one has to choose 'a good story' and commit to an almost conventional novel. The linear narrative associated with print becomes an option within the multiplicity of the text, rather than being multiplicitys other" (Hackman 94-5). In this sense the ideals of print and hypertext, if not the forms themselves, are able to exist in the same space, allowing for an interaction between linear and mulilinear narratives rather than a binary distinction. As Hackman says,

> *Patchwork Girl* presents print as the remediated companion to, rather than the opponent of or a precursor to, hypertext. Hypertext clearly offers Jackson a medium and a metaphor for exploring the fragmented nature of subjectivity, a fragmentation that has long been associated with the feminine, though it is not exclusive to the female gender [sic]. This exploration of fragmentation makes sense, however, only within the context of the print tradition, as both a contrast to and a reevaluation of the association of print with qualities of permanence and wholeness. *Patchwork Girl* therefore references both print and hypertext in order to question how our world and sense of self are structured by both the illusion of wholeness and the impossibility of complete fragmentation (105).

We see that hypertext narratives like this are not entirely fragmentary; their through-lines or directions from their creators are not as apparent as in the still-fragmented novels of modernist fiction, but they remain.

1.5 Conclusion

This literature review has discussed recent trends in narratology, with a focus on how the field has grown from its beginnings in analysing simple printed stories to addressing all kinds of narratives, including hypertext fiction. We have discussed the boundaries between fiction and games and the role of the reader in determining that distinction. General criticism of hypertext fiction has also changed over time and become more nuanced. Elsewhere, just as hypertext was defined against games, modernism was defined against the fiction that came before it. Modernism does more to represent subjective human experience, particularly of time. It is influenced by the technology and social conditions of its time, but the aspect that best

defines it is its impressionistic and experimental technique, its commitment to representing the experience of its characters. We have seen how quantitative methods have allowed us to see that all the more clearly, and add to traditional literary analysis of modernist texts. Technology also influenced hypertext by expanding the possibilities for the kinds of texts that could be created. In the rest of this thesis, ideas about narrative, modernism, and hypertext will be explored more deeply; this review serves as a survey of those fields in their recent state, which will now be built upon.

After the writing of this chapter, many things were expanded upon as the research progressed for this project. For example, the influence of technology on fiction is focused on even more in Chapter 2, in relation to modernism. The manner in which people think about time, and how that is incorporated into narration, is explored deeply. Time has from the beginning been a key focus of this project, and that aspect only grows in the rest of the thesis. In the methodology, other annotation schemes are analysed, with a custom system becoming necessary to fully engage with the concepts of narrative time on which this thesis must focus. The quantitative studies in this review were inspirational in showing that one could take a quantitative approach to comparing works of fiction, including modernist texts. The nature of hypertext is later analysed in more literary depth, with close readings of the hypertext fictions from the corpus, but the history of the genre and its criticism that is provided in this chapter gives important context to that. This literature review is essential as a foundation to these and many other endeavours throughout the thesis. It was important for developing the ideas of the project, and obtaining a survey of what already existed in the fields of narratology, modernism, and hypertext fiction. The rest of the research is informed by this foundational work because here the basics are covered, allowing the project to explore more specific areas of narrative, modernism and hypertext. The work became more nuanced with attention given to narrative levels as well as anachrony and subjective narration; the nature of all of those things are more richly explored later in the thesis. Furthermore, the frequency of tags and the proportion of words contained within them come to be used as concrete ways of comparing how much those narrative techniques are happening in the texts. The literature review began all of this, by setting the stage for further considerations of narrative, modernism, and hypertext. The narrative techniques used in modernism and hypertext communicate subjective experiences of time and memory. We now must see just how extensively those narrative techniques are shared between texts from the two genres, and we begin with a traditional literary analysis of time and

narrative in modernist fiction.

Chapter 2

The Past: Modernist Narrative

2.1 Time in Modernist Narrative

The perception of time in the western world changed quite dramatically during the late nineteenth and early twentieth century, and this influenced the narrative practices of modernist fiction writers, consciously or otherwise. That is the principal argument of this chapter, and it is part of the basis for the overall argument of the thesis: that the modernist and hypertext fictions in the corpus use temporal narrative disruptions to a similar extent, in order to mimic how humans perceive time. Changing cultural ideas about that perception influenced literature to attempt to represent time differently, and the way to do this was through narrative disruptions. Stephen Kern has provided the starting point for much of the discussion on the philosophical and scientific ideas of time at the turn of the twentieth century having an influence on the literature of that period. He also notes the influence of technology on society, how advances such as telegraphy and air travel collapsed divisions of time and space that had previously existed between people. Kern isolates three philosophers from the period who had a significant impact on society's ideas about time: Henri Bergson, William James, and Edmund Husserl. Of these three Bergson had perhaps the strongest influence on the narrative techniques employed by modernist writers, whether they admit it or not. Woolf said that she had never read Bergson, although the fact that Woolf's sister in law wrote a book on Bergson makes this seem unlikely. Even if Woolf - known as a voracious reader - hadn't read anything else of Bergson, she surely would have read something published by a close family member. Anne Fernihough makes this claim and connects it to Bergson's possible influence on one of the most noted narrative features

of modernist fiction, saying that there is "reason to believe that Woolf would have known of Bergson's work, on which her sister-in-law, Karin Stephen, had published a monograph. Bergson's notion of *durée* ('duration') was a major influence on the cultural climate from which the stream-of-consciousness novel emerged" (68). Clearly Bergson had an impact on the content of modernist fiction, as Joyce references Bergson in *Finnegans Wake*, when he "uses his narrator's attack on Professor Manganiello to rebut [Wyndham] Lewis's attacks on Bergson" (Gillies 133). What this chapter contends is that Bergson's ideas had an influence on the narrative style of modernist fiction, on how these novels depict the experience of time passing. Cultural changes in the conception of time influence how stories are told within literary genres. If we examine how those cultural changes affect the narrative strategies of literary works in a particular genre and discover new insights, then this changes our conception of that genre, and the genres that are influenced by it. In the early twentieth century, Bergson's work focused on the subjective experience of time. The most significant concept he introduced was that of durée, or duration.

2.1.1 Bergson, duration, and simultaneity

Duration is defined in opposition to what Bergson calls extensity, and there are equivalent opposite phrases such as succession versus simultaneity and heterogeneous versus homogeneous. The second part of each of those formulations, what we will choose to call simultaneity here, is the way that we as people normally think about time, when we decide to think about it. In our minds we create a space in which everything is equal - homogeneous space - and when we remember things, we fill that space in our mind with moments from the past. We do not remember the past as a whole continuum, we remember individual moments. As a result, we place them in that space in our minds as equals and with space between them. This is what Bergson means by saying that we spatialise time; time is such an abstract and difficult-to-conceive concept that in order to engage with it we end up applying ideas that we know from a more easily measurable concept, space. We erroneously imagine moments dotted around the space in our minds, with space between them. We artificially hold all those distinct moments from the past in our minds simultaneously. For Bergson, this is not how time truly works. The true lived experience of time, duration, cannot be spatialised, because moments cannot be recalled consciously at all, and certainly not as distinct from one another. As soon as a moment has passed, it is gone forever. To recall a moment in our minds is to create a false conception of

time. Duration is the experience of only living in the present, and not consciously thinking of time, but feeling it as an unbroken continuum. As such, moments cannot be isolated. We can unconsciously feel that things have happened in the past, and act on that in the present, but we cannot deliberately remember the past because, as we have said, that leads us into artifice. Duration is experienced by people when they don't think about time and instead just feel it and only pay attention to the present. In practical terms, a person's experience of the present moment is influenced by the accumulation of memories from every moment they have lived through up to that point, but this only remains duration if we don't consciously think about the parts of the past that have influenced us, or even conceive of them as separate parts.

We can see both simultaneity and duration in modernism. Simultaneity is manifested, as in all fiction, when anachronies occur. To engage in analepsis a character and/or the narrator must hold moments from the past simultaneously in their mind. An omniscient narrator can hold moments from the future in mind and create prolepses, in the process also engaging in simultaneity. Duration occurs in fiction in the form of stream-of-consciousness and free-indirect-discourse narration. Duration can never fully be attained in literature, but these techniques get close because they follow the thought patterns of characters. Stream of consciousness does this more immediately and intimately, which allows it to be more unconscious - so closer to duration - than free indirect discourse, but free indirect discourse still follows thoughts linearly, just from a more distant perspective.

Duration is broken in both stream of consciousness and free indirect discourse when they divert into memory. This creates simultaneity, as the characters or narrator spatialise and separate past moments form each other. Duration can then be re-attained when the narrative returns to the flowing present. This shows how anachronies are powerful break points in narrative. They disrupt the flow of the narration, and stop duration from occurring.

Modernism is often concerned with representing subjective human experience faithfully, and it is possible that Bergson's theories, and their impact on wider society's thinking about time and memory, influenced the manner in which modernist narratives represent the experience of time. Free indirect discourse existed before modernism so a kind of duration could have been already happening there without being named as such, but stream of consciousness, the technique that is closer to duration, begins with modernism. In that sense it is possible that modernist writers may have been consciously or unconsciously influenced by Bergson's ideas

to show the flowing experience of time in their narration. Similarly, Bergson's conception of simultaneity could also have influenced fiction writers in how they present moments from the past. From Bergson, people in the early twentieth century had a new way of thinking about how they hold moments from the past simultaneously with each other and with the present. This might have made modernist writers perform this operation - analepsis in narrative - more frequently and for larger proportions of their work, in order to get closer to how we consciously think about time and our memories. While duration in stream of consciousness and free indirect discourse attempts to capture how it feels when we unconsciously experience time, simultaneity provides a framework for capturing how we experience memory and the past in the present, both in stream of consciousness and free indirect discourse and outside them, and as a result this applies to all modernist narratives, not just the ones that use those subjective narration techniques.

Durée was described by Bergson himself as:

> the form which the succession of our conscious states assumes when our ego lets itself *live*, when it refrains from separating its present state from its former states. For this purpose it need not be entirely absorbed in the passing sensation or idea; for then, on the contrary, it would no longer *endure*. Nor need it forget its former states : it is enough that, in recalling these states, it does not set them alongside its actual state as one point alongside another, but forms both the past and the present states into an organic whole, as happens when we recall the notes of a tune, melting, so to speak, into one another. (Bergson 100)

This is an entirely subjective experience of time, as Mary Ann Gillies elucidates when parsing the same quote: "Bergson explains durée as internal time, the time of active living; as something inapplicable to the world outside the self" (11). This inapplicability to the outside world is a result of duration something one can only experience subjectively in the mind, even as one interacts with the outside world and is not consciously thinking about how one is subjectively experiencing duration. Indeed, "inapplicable" is a key word here, as one cannot apply ideas of time to real life without spatialising the past into moments. To think about the past consciously is to lose duration and engage in simultaneity. Durée cannot be measured, because any attempt to do so would unavoidably have to stop at a particular point in time, thus spatialising time and breaking it up into discrete units which can themselves be measured, but which are now

distinct from the real subjective experience of time as unbroken and continuous. Humans cannot actively comprehend time without breaking it down, only unconsciously perceive it. As Laci Mattison notes when discussing the influence of Bergson on Nabokov, when "we measure or count time (in seconds, minutes, hours), when we make timelines, we ultimately sever ourselves from the durational flow, Bergson argues, by spreading out infinitely divisible units in space. We hollow out 'real time,' crafting it into a mere representation of itself" (39). Bergson "posits out a difference between true time, 'duration', the mode by which our basic awareness confronts the world, and the 'clock-time' conceptualized by a reflective consciousness, which is a distorted representation of time based on the properties of space" (Kemp 396). When we read fiction, the past of a novel accumulates in the reader's memory while at the same time the narration still flows forwards, not deliberately looking back, capturing something of durée in the sense that, as Stephen Kern notes, "for Bergson every movement leaves traces that continue to affect all subsequent physical or mental processes," without one having to actively think about those traces (40-1). As Kern highlights, Bergson appears to anticipate some of the goals of literary modernism when he hopes that "if some bold novelist, tearing aside the cleverly woven curtain of our conventional ego, shows us under this appearance of logic a fundamental absurdity, under this juxtaposition of simple states an infinite permeation of a thousand different impressions which have already ceased to exist the instant they are named, we commend him for having known us better than we knew ourselves" (Bergson 133). This implies that modernist fiction does something special: that through its new representation of the passage of time and the effect of cumulative memory on consciousness, it allows us to understand human nature better than we did before. In addition, what modernist novels do with simultaneity is just as important as how they engage with duration. Simultaneity is important in the life of the mind - we remember moments all the time - and that is represented as anachrony in fiction. Novels hold the past and the present together in space, just as our minds do.

2.1.2 James and Husserl

Bergson was not the only philosopher thinking about memory around the turn of the twentieth century. William James wrote about different kinds of memory, and the idea of consciousness as a stream. Kern states that while "James and Bergson tended to use somewhat different metaphors to characterize thought, they agree that it was not composed of discrete parts, that any moment of consciousness was a synthesis of an ever changing past and future, and that it

flowed" (24). While there is a difference in their metaphors - the stream versus duration - there is also a difference in the way that James and Bergson perceive the effect of memories on the present:

> William James saw the persistence of the past as a function of the fluid nature of human consciousness and, like Bergson, believed that the past remained in a dynamic relation with the present - with one essential difference. James saw a sharp distinction between recent memories that are part of the present and distant memories that are recollected as something separate; Bergson emphasized the constant interconnection of all past experiences with the present regardless of how far back they may have occurred. He would not allow any differentiation between two kinds of memories, especially if they were characterized, as they were by James, in spatial terms as near and distant. Nothing is 'far away' in Bergson's *durée* (Kern 43-4).

James's conception of memory - broken into distant memories and immediate or just-passed experiences - may be closer to the way memory is rendered in modernist fiction than the metaphor of durée. The idea of distant memories having the sensation of being something separate, even as they infringe on and take over the current moment, corresponds quite well with the sharp juxtapositions of a memory interjecting in a narrative.

Edmund Husserl formalised this approach into terminology for describing the memory of recent events ('retention') and the re-emerging of more distant memories ('recollection'). Kern notes that retentions and recollections "have a different vividness, a different relation to the present, and a different nature as parts of the past. A recollection may change the order or the rate of the original events, whereas the order and rate of a retention is always fixed in experience" (44). Nonlinear narratives play with that concept of recollection allowing for the reordering (or re-prioritising, or re-contextualising) of story events through the use of analepsis and prolepsis. Recollections from the distant past constitute the unintentional spontaneous diversions into memory experienced by a character or narrator. Meanwhile, even in a linearly-told story, near-past retentions are the kinds of memories that build up over the course of a narrative, affecting the reader's conception of that narrative, adding to the previous retentions and gradually changing the reader's perception of the narrative as a whole. The two kinds of memories complement each other in narrative.

2.1.3 Technology and fiction

Apart from philosophers, there were other influences on the public's changing ideas of time during this period, which in turn caused changes in the depiction of time in narratives. In physics, Einstein developed the theories of special and general relativity in 1905 and 1916 respectively, and won the Nobel Prize for Physics in 1921. On a more tangible level, there were changes in the technology that some people could use, and these changes afforded an increase in the pace of communication and travel that may have created a new sense of the present. Kern highlights the telegraph in particular, and ultimately the telephone, for their power to nullify the effect of distance on the time required for interpersonal communication; the telegraph allowed people to communicate quickly across great distances, while the telephone made this instantaneous. Kern uses the example of the sinking of the Titanic in 1912 to demonstrate the effect of telegraphy on mass culture. A catastrophe that occurred late at night in the middle of the North Atlantic was known to other ships in the vicinity very quickly; many people on those ships were able to follow the distress signals from the Titanic in real time. The first distress call was sent from the Titanic 25 minutes after the iceberg hit, and "within a few minutes the airwaves were rippling with signals as over a dozen ships became aware of the disaster" (Kern 66). The telegraph signals spread, and reached Newfoundland just over an hour later; from there it was transmitted to Europe, so that "by early morning the entire world was privy to news of the disaster" (Kern 66)[1]. The purpose of Kern's example is to show that "the ability to experience many distant events at the same time, made possible by the wireless and dramatized by the sinking of the Titanic, was part of a major change in the experience of the present" (68). Never before had so many people experienced the news of a mass loss of life so rapidly, despite the incident occurring in a remote location. The telephone created an even greater change in the experience of the present. According to Kern, the telephone "made it possible, in a sense, to be in two places at the same time. It allowed people to talk to one another across great distances, to think about what others were feeling and to respond at once without the time to reflect afforded by written communication" (69). Technological developments had progressively reduced the amount of time necessary for humans to communicate until it closed the gap entirely, and communication became instantaneous.

Developments in communications technology were manifested in fiction. In 1902, Rudyard

[1]One notes that Kern's definition of "the entire world" might be slightly loose here.

Kipling, while certainly not a modernist writer, utilised narrative experimentation inspired by the wireless telegraph, in a kind of proto-modernist short story, or a part of the impressionist turn, as Heather Fielding analyses the story. The narrator of 'Wireless' visits a friend who is operating a wireless telegraph machine. The key moment of the plot involves the telegraph operator speaking lines of Keats that he did not know previously, implying that the unseen electromagnetic transmissions of the machine have affected this man's brain in such as way as to allow communion with the dead. This is a typical association between a little-understood technology and the ghostly or the supernatural. However, the more pertinent aspect of the story for this study is the fact that the narrator's close contact with this instantaneous, electronic and yet ethereal mode of communication affects the state of mind of the narrator, whose telling of the story becomes increasingly impressionistic as well as increasingly taking the form of reporting other character's speech, acting as more of a conduit than an interpreter adding his own perspective. Fielding states that Kipling's narrator is "dangerously affected by sensory input, his point of view grows more subjective and even hallucinatory, and he loses his understanding of what is happening around him. These changes affect not just the narrator as a character, but also the story's mode of narration itself, which, this essay argues, becomes recognizably impressionist" (25). By reducing the narrator's comments on the story, his self is diminished, receding into the background. As Fielding writes, this kind of narrator is "letting in the world so much that psychic fragmentation results" (36). This change in the narrator is an indelible result of modern technology, because as wireless "devices moved out of the post office they gave impressionist writers metaphors with which they could think about the implications of being inundated with communications from the outside world, a receptivity that makes meaningful communication virtually impossible and leaves the individual subject isolated in his oversensitivity" (Fielding 40-1).

There are further influences of telegraphy and telephony on high modernist works. The concise, impersonal bursts that deviate from the main narration of *To the Lighthouse*'s 'Time Passes' section in order to bluntly inform the reader of the fate of various Ramsays is reminiscent of the clipped writing style engendered by the pay-per-letter format of the telegram. Telegrams are not actually mentioned in this novel though, and the telephone is mentioned in only one paragraph, when William Bankes is remembering the experience of hearing a disembodied voice on the phone. ""Nature has but little clay," said Mr. Bankes once, much moved by her voice on the telephone, though she was only telling him a fact about a train, "like that of which

she moulded you." He saw her at the end of the line, Greek, blue-eyed, straight-nosed. How incongruous it seemed to be telephoning to a woman like that" (Woolf 29).

In *The House in Paris*, telegrams are referenced many times as means of the characters communicating their travels to each other, in both the present and past sections of the novel; for example arrangements are made to pick up the children from their trains via telegram, and in the earlier timeline Karen, Max and Naomi communicate by telegram. However, an apparatus adjacent to the telephone has a greater significance in the novel than the telephone itself, or any telegram. The notepad situated next to the telephone in Karen's parents' home becomes a key site of conflict between Karen and her mother. In a novel concerned with the withholding and carefully-timed revelation of information, Karen's deciphering through pencil-rubbing of a message her mother had written on the pad earlier shows a breakdown in her communication with her mother. Karen's mother has tried to avoid a conflict by removing the message; Karen's actions might have been different if she had seen it sooner. Karen makes the pencil rubbing after noticing that the pad was absent, and then present again, indicating that its presence in that spot in their home is familiar. If the piece of technology - the telephone - had not existed, then this piece of paper would not exist, and would not have such an important function in the plot. In *Tender is the Night* the telephone is mentioned many times (more times than in *The House in Paris*, and far more times than in *Pointed Roofs* or *To the Lighthouse*), but not with the significance that it carries, however tangentially, in *The House in Paris*. To the wealthy characters in Fitzgerald's novel, the use of this piece of technology has become routine. These novels by Bowen and Fitzgerald were both published in the mid-1930s; telephony and telegraphy were no longer new. This assimilation into daily life results in the fact that while the telephone pad in *The House in Paris* has a plot effect, the technology in these examples does not have the same kind of effect on the narrative style itself as had been seen in 'Wireless'. However, these examples do capture a change in how people interacted with each other in the early decades of the twentieth century. It was now easier to make and change plans, particularly related to meeting people at a particular time and place. If one wanted to speak to someone else who owned a telephone, one could do so immediately. It did not matter that they were in a different location. This was a new experience of the present, a change in how humans relate to each other that was driven by a change in available technology. Ironically, while this may have brought people's voices together, it also sometimes created an overwhelming amount of media stimulus, a more frequent stream of noise, which resulted in the fragmentation of the self

seen in 'Wireless', the subdued but significant familial conflict in *The House in Paris*, the lack of importance of telephonic communication in *Tender is the Night*, and the odd, objectifying reminiscences of William Bankes in *To the Lighthouse*. While technological developments made it easier to speak to and arrange to meet one another, it also enabled some uglier parts of human behaviour.

2.1.4 Clocks, time, and narrative

The ability to meet someone at a pre-arranged time is dependent upon everyone agreeing what time it is. Public time and public clocks were increasingly used through the nineteenth century, train timetables further created a need for standardised time, and in the mid-19th century Greenwich Mean Time became the standard across Great Britain, with other countries adopting Greenwich as the prime meridian in the decades afterwards. This created a discrepancy of sensation that had not previously existed between this new, standardised public time, and the interior subjective Bergsonian experience of time, the kind of experience that modernist narratives attempted to represent. This difference creates a tension. Cedric Van Dijk isolates the wristwatch as an instrument of further intrusion of public time on private life, when wristwatches became more widely used during and after the First World War. He states that "the wristwatch symbolizes the way in which oppressive time systems were lived and internalized" (Van Dijck 163) and underlines the discrepancy between the passing of time represented by the staccato ticking of a watch's hands and the more linear flow of time experienced in the mind of Mrs. Ramsay in *To the Lighthouse*, as her

> wristwatch epitomizes Mrs. Ramsay's inescapable embodiment of the oppressive pace of modern life: if her mind flows like time, then perhaps her heart ticks like the clock. It is instructive to note in this respect how in the mother's encounter with the watch, the language shifts from a Bergsonian concern with flux and becoming ('merging and flowing and creating') to the image of rewinding one's spring, which suggests the mechanical rather than the intuitive (Van Dijck 173).

The wristwatch is saying one thing, and Mrs. Ramsay's internal sense of time is saying another. Moments narrated from her perspective slow time down, extending the moment as she considers or remembers something, before returning to the normal flow of the present. The speed at which time is narrated from Woolf's characters' perspectives is mutable. It is often in flux. Characters

like Mrs. Ramsay, Lily Briscoe, and Mr. Ramsay are prone to go exploring deeply through their thoughts, putting whatever is happening in the real world on hold, slowing time down in the narration as pages of thought pass in a second or two of story time, before returning to a flow of time more closely analogous to reality. This connects to Bergson and the idea of durée, of the experience of time being subjective; even as it is continuous and unbroken, it is ever-changing and flowing. Of course, it is impossible to fully capture this in prose, and divisions of time into discrete moments can be seen in Woolf's novel when it uses analepsis, but the flowing free-indirect-discourse narration is closer to a modern, even Bergsonian, idea of time than fiction that came before it.

In other modernist novels, there is an observable discrepancy between standardised, linear, public time and the private experience of simultaneous moments in time felt by the characters. *The House in Paris* and *Tender is the Night* feature large-scale movements of the narrative to an earlier point in story time. In those two cases that transition into the past is for the purpose of adding much greater depth and meaning to the story that we had been reading - we see dark origins that alter the way that we see the present moment in those stories. The characters remember things from the past, and the novels themselves delve into the past in their middle sections, placing those times alongside the present in space. *Pointed Roofs* is a more nuanced example of a narrative disconnected from linear, public time or clock time. This novel does not have the chapter- or section-sized movements backwards and forwards in time that those other novels have, but it does feature many smaller instances of analepsis and prolepsis, following Miriam Henderson's thoughts, and in this way the narration is a closer representation of the subjective experience of time, where memories can be held in the mind simultaneously with the present. In the narration of *Pointed Roofs* we see Miriam's mind arresting and flashing back to something significant earlier that morning or the previous day, before working back up to the present scene, or else making a similarly sudden return to the present. We see this occur when one day early in her time in Germany, Miriam hears piano music, which triggers a memory of her second day there, when she came across a younger girl named Emma Bergmann playing piano:

> As she reached the upper landing she began to distinguish against the clangour of chromatic passages assailing the house from the echoing saal, the gentle tones of the nearer piano, the one in the larger German bedroom opposite the front room for which she was bound. She paused for a moment at the top of the stairs and

> listened. A little swaying melody came out to her, muted by the closed door. . . . Then the careful unstumbling repetition of a difficult passage drew her attention to the performer, her arms dropped to her sides and she passed on. It was little Bergmann, the youngest girl in the school. Her playing, on the bad old piano in the dark dressing-room in the basement, had prepared Miriam for the difference between the performance of these German girls and nearly all the piano-playing she had heard. It was the morning after her arrival. She had been unpacking and had taken, on the advice of Mademoiselle, her heavy boots and outdoor things down to the basement room. She had opened the door on Emma sitting at the piano in her blue and buff check ribbon-knotted stuff dress. (Richardson 21)

The analepsis begins with "Her playing." Note the change from the past tense to the past perfect tense for the analepsis. This memory continues for the rest of the chapter; in the next chapter Miriam's mind jumps to more memories from the first few days after her arrival. In this expression of what the character is thinking, the narrative does not try to have a standardised linear, proportional measurement of time. With its commitment to subjectivity, it instead approaches the Bergsonian conception of simultaneity.

Bergson's potential influence on modernist fiction writers has been deliberated in criticism. Mary Anne Gillies discusses the phenomenon extensively in *Henri Bergson and British Modernism.* She notes that "despite Leonard Woolf's claim that Virginia Woolf had not read Bergson's work nor even such secondary sources as her sister-in-law Karin Stephen's book on Bergson, a survey of Woolf criticism reveals that many critics have noted a Bergsonian strain in her work" (Gillies 107). There is not a strong consensus on the extent or relevance of the potential influence of Bergson on Woolf, and it received less attention after the 1960s. On the other side of the scale, it is quite plain that Joyce was influenced by Bergson. The possible influence of Bergsonian thought on Richardson's fiction is perhaps more interesting. Like Woolf, Richardson stated that she had never read Bergson. However, Gillies notes that "Richardson was very interested in philosophy . . . It seems likely that in the course of her studies she would have come across Bergsonian ideas, even if they were not presented as such" (152). Gillies finds this influence to be evident in Richardson's writing, as "Richardson practices stream-of-consciousness and is interested in breaking down conventional narrative structures and replacing them with what she sees as the flow of her character's life" (152). This flow, this subjective representation of the experiences of an individual, of course, relates to durée. There is also the

opposite of duration, simultaneity of moments, as the narrative of Miriam Henderson's life often jumps backwards and forwards in time; like memory or learned experience, every moment can be present at once. Then, also, the progression of Miriam's life in broadly chronological order through the series of *Pilgrimage* novels is more like duration, as the long narrative connects every part of Miriam's life to every other part in a continuum. Gillies supports this, saying that "later versions of Miriam are always linked to previous ones through shared experiences that are transformed by the newer manifestation of Miriam's self. The process of self-definition is emphasized in the novel, but at each moment in Miriam's life we see her whole. There is never a perfectly developed self, just a constantly evolving one; thus each depiction of Miriam is as important as any other" (158). And, as a reader makes their way through a long series of books such as *Pilgrimage*, they, like Miriam, will unconsciously carry with them the events of previous parts of the story, and are also just as susceptible as Miriam to those memories being brought to the surface suddenly by an image or moment of realisation, a flash of simultaneity breaking up the duration. Everything is connected. The characteristics of Richardson's prose contribute to the effect of continuous duration. Richardson

> creates the sensation of each moment being the present one, while creating a style that almost dispenses with conventional form. Punctuation, sentence structure, and paragraphs cease to be important and apparently haphazard shifts in narration and tense occur frequently. . . . Apparently, the unusual physical form of the novel - its long rambling sentences, for example - was developed to convey just this sense of continuity, of each moment lingering into the next. At any one point in *Pilgrimage* - Miriam's months as a teacher in Germany (*Pointed Roofs*), her career as a dental secretary (*Tunnel*), her time in Switzerland (*Oberland*), or her life with the Quakers (*Dimple Hill*) - the reader can enter into one of her present moments. The reader need not be aware of her past or her future in order to come to know Miriam, for she is revealed in each moment. Yet all moments do impinge on all others; there is no single moment that stands divorced from the others (Gillies 154).

Even if Richardson had not read Bergson, she was writing in a style that depicted time and individual experience in a different way to literature from previous eras. Anne Fernihough writes that "Bergson's notion of *durée* ('duration') was a major influence on the cultural climate from which the stream-of-consciousness novel emerged" (68). It seems only reasonable to suggest that Richardson, like Woolf and Joyce, was influenced if not directly then indirectly by the

philosophical ideas about the nature of time that were prominent in the early part of the twentieth century. Indeed, the way memories accumulate in her work aligns with Bergson's idea of consciousness as a snowball instead of a stream; incidentally this is fitting because Richardson disliked the term *stream of consciousness*. Fernihough notes Bergson's popularity in Richardson's circles at her time of writing, and quotes him describing his chosen image for representing the increasing mass of memory:

> 'My mental state, as it advances on the road of time, is continually swelling with the duration which it accumulates: it goes on increasing - rolling upon itself, as a snowball on the snow.' For Bergson, memory was all-important as the condition of our free will: it is through memory, he argued, that our actions transcend predictable mechanical responses to the extent that we bring our accumulated experiences to bear on a given situation. Consciousness or 'duration', in which the present is swollen with the past, is the essential feature of our humanity (Fernihough 68-9).

There are too many coincidences; Bergson and the other theories of time that prevailed at the turn of the twentieth century cannot be ignored as potential influences on modernist fiction writers. That is one of the points that Kern was making in 1983.

Some aspects of Kern's work have been updated in the decades since. Ursula K. Heise begins by agreeing with Kern's assertion that technological developments influenced the way that people generally thought about time, which in turn influenced the way that writers represented time in fiction. She notes that perceptions were changing in the modernist era, stating that the decades around the turn of the century "brought about a wave of scientific and technological innovations and a revolution in the awareness of space and time" (Heise 33). There are some now-familiar references to specific pieces of technology, and to the standardisation of time:

> the development of electric communication devices such as the telephone, telegraph and the radio led for the first time in history to the disjunction of spatial from temporal distance, and therefore to the necessity of coordinating the local times of far-removed regions in a standardized network of global simultaneity. From the establishment of Greenwich as the zero meridian in 1884 to the creation of a global temporal network based on signals sent from the Eiffel Tower in 1913, the modernist period saw a whole series of national and international measures designed to ensure a uniform time frame for the nation and the world (Heise 34).

The observation about the dislocation between spatial and temporal distance informs readings of modernist fictions in which time and space are collapsed, as events that should seem to be distant in one of those respects or the other are instead narrated in close proximity (for example the simultaneity of memories with present experience explored by Richardson in *Pointed Roofs*, or the consolidation of city space in the 'Wandering Rocks' episode of Joyce's *Ulysses*). The mention of the organisation of public time is also important, in relation to the question of whether public time could be seen as oppressive or restrictive when compared to the subjective individual experience in time which is at least partially captured by some modernist fiction but which is not represented at all by the measured quantitative units of public time. Heise states that general and special relativity and quantum physics were not understood in detail by most people, but people were vaguely aware of their existence, enough that the general ideas involved gained some sort of traction in the public's imagination. These scientific ideas about the malleability of time and space would seem to conflict with the increasing regimentation of prescriptive public time. Modernist narratives grappled with this conflict as well, as Heise writes that "the central problem for the modernist time sense is not just the confrontation of standardized public time with the unpredictability of personal, organic time, but more generally the realization that there is no single concept of time by means of which one can adequately account for the different layers of reality that make up the world" (Heise 39).

Heise expands on these perspectives, and adds something that Kern did not, by providing more nuance on how new theories of time affect narrative specifically. The modernist fiction that we tend to think of as being radical, or exemplary of the genre or period, has different narrative structures to the standard linear narratives of the nineteenth-century novel. Heise presents this as a tendency of modernist novels generally, which poses the question of temporal experimentation being an essential characteristic of modernist novels. Are modernist novels defined by their temporal narrative form or by their period of publication? Indeed, what is the typical nineteenth-century novel? Modernist novels are broadly defined by new advances in either prose style, form, narrative, or some combination of these characteristics. Heise writes that "whereas temporal succession was the principal medium of narrative meaning in the nineteenth-century novel, modernist novels tend to foreground simultaneity in their temporal organization" (50), and her use of the phrase "tend to" allows us to keep our working definition of modernist fiction. Nineteenth-century novels in English tend to have narratives which maintain a linear progression of time, and indeed often have a noticeable beginning-middle-end plot structure.

So, we can move into the main part of Heise's argument. This is that the function of a modernist narrative, whether it radically distorts temporal linearity or not, does so at the service of expressing the influence of the past on the present, often but not always filtered through the subjective experience of time felt by a character. This allows modernism to include a diverse range of narrative strategies. Of these Heise identifies the retelling of the same event from the perspective of different characters (utilised more than once by Faulkner in *The Sound and the Fury*), the use of a roving narrative perspective that dips in and out of the minds of various characters in one scene (for example the dinner scene in *To the Lighthouse*), the interweaving of memories with the present, creating an experience of simultaneity (for example particularly in Richardson, but also in all the other novels in this corpus), and events of the past being reconstructed in pieces at different times in the narrative by different characters (Heise cites Conrad's *Lord Jim*) (Heise 49-51). The outcome of this is that individual characters' voices are important in conveying a subjective experience of time in narrative form, and that even when unreliable narrators contradict each other this is an advantage because the reader is able to infer a complex picture of the scene. Indeed, the use of multiple narrative perspectives allows for nuance in the depiction of the characters at hand; in the dinner scene in *To the Lighthouse* we get to see what the various characters think about each other as they are having a conversation. But also in relation to time these strategies of multiplicity provide the sensation of time passing at different speeds for different people depending on their thoughts, and this is reflected in the style of the prose. Narration from Mr. Ramsay's perspective features long, meandering sentences conveying thoughts about his place in his field of philosophy; he detaches from the present moment and what is going on around him in order to stop the story-time and focus for many sentences (which pass in a matter of seconds in story-time) on what it takes to "reach Q" in his alphabetical metaphor for the development of his philosophical thought process (Woolf 41). This is contrasted with, for example, the quick spite of someone like Tansley, whose narration reacts to what is going on around him and rushes to judgement, never deviating for long from the current scene (and mercifully not given a chance to do so; we do not get much narration from his perspective).

Multiple narrative perspectives which present the movement of time in different ways also show that human experience does not correlate with one, fixed public time; human experience of time does not even correlate from human to human, or even within one mind from moment to moment. Heise states this, and then complicates it:

> [C]learly, many modernist novels, with their emphasis on individual psychological time, register suspicion of and resistance to the increasing standardization and mechanization of time in the public sphere. But it is misleading to claim that the major concern of modernist 'time novels' is to provide a record of individual temporal experience in its opposition to public time, since many modernist novels in fact do not focus on one individual mind, but juxtapose the memories and perceptions of several different characters (51).

The conflicting relationship is not always individually perceived time in fiction versus mass public time in the real world, but often rather several changing individual times in fiction versus public time. Heise concludes that "Even though the authors may not always have intended it, the multiplicity of private temporalities that combine in the modernist novel adds up to an alternative social time, a time beyond the individual that is less alienating and impersonal than the globally standardized one of the Greenwich mean" (51). By providing variations on this kind of social time, or different combinations of individual times, modernist fiction responds to the inadequacies of public time for representing how the human mind perceives time.

2.2 Anachronies: Analepsis and Prolepsis

A major strategy employed by modernist fiction to emulate subjective experiences of time is the use of *anachronies*, or *analepsis* and *prolepsis*. The modern narratological definition for these terms begins with Gérard Genette, who uses the term *prolepsis* for "any narrative maneuver that consists of narrating or evoking in advance an event that will take place later, designating as *analepsis* any evocation after the fact of an event that took place earlier than the point in the story where we are at any given moment, and reserving the general term *anachrony* to designate all forms of discordance between the two temporal orders of story and narrative" (40). The use of the verb 'will' as opposed to 'may' is significant; prolepsis does not include speculations by characters on future events that may or may not occur, it only includes events that definitely do happen at a later point in story time, which are addressed in advance in narrative time. Anachronies are used in modernist fiction in a way that may differ from any genre that had come before. They have been used for centuries, but certainly they are used extensively in modernist fiction, and often for the purpose of finding new ways to represent time, or ways of representing the subjective human experience of time that are truer to what

society was coming to understand about the science and philosophy of time around the turn of the twentieth century.

Genette provides some further distinctions between types of anachrony, and each subcategory is visible in different works of modernist fiction. Firstly there are some useful terms for describing the length of an anachrony and its position in story time relative to the point of departure: "An anachrony can reach into the past or the future, either more or less far from the 'present' moment (that is, from the moment in the story when the narrative was interrupted to make room for the anachrony): this temporal distance we will name the anachrony's *reach*. The anachrony itself can also cover a duration of story that is more or less long: we will call this its *extent*" (Genette 48). The extent of an anachrony can be anything from a few seconds to many months or years. This deviation in story time can take up narrative time for a handful of words or many chapters. For categorising types of analepsis, Genette uses the terms external analepsis to describe a jump to an event that occurs before the main part of the story, and internal analepsis for a transition to something that occurs within the main part of the story. For example, *Ulysses* returning to 8am in the fourth chapter is an internal analepsis, because that time falls within the main story of the novel, that one particular day, whereas Bloom remembering something that happened years before - for example his sudden memory of the scene of his father's death while he is travelling to the funeral in the 'Hades' episode - is an external analepsis, as it leaves behind 16 June and goes somewhere (or, more accurately, sometime) entirely separate. Bloom makes an observation in his mind about Martin Cunningham, then immediately flashes back to the "afternoon of the inquest. The redlabelled bottle on the table. The room in the hotel with hunting pictures. Stuffy it was" (Joyce 80). Bloom then returns to the rhymes that had been repeating in his head, and then we read a physical description of the carriage rattling through the city. This example is what Genette calls a partial analepsis as well as an external one; a partial analepsis is a "type of retrospection, which ends on an ellipsis without rejoining the first narrative" (Genette 62), or a flash back to the past which does not fill in all the remaining time between the past event and the point of departure in the current moment. It simply jumps back for some time, and then jumps forward again, it doesn't need to account for anything in between. The previous example, of the novel resetting to 8am at the beginning of chapter four, is an internal and complete analepsis, as it keeps telling the story all the way up to the point in story time that it left behind; it "joins the first narrative without any gap between the two sections of the story" (Genette 62). These different kinds of anachrony achieve

different objectives; a brief partial analepsis can quickly inform the reader on some essential piece of information from the past which complicates a character or situation in the present. An extended complete analepsis can add a whole section of the novel, a digression that turns out to be crucial to how the work is understood as a whole. Their flexibility reflects the malleability of how modernist novels treat the linear progression of time.

2.2.1 Anachronies in practice in *The House in Paris*

In Elizabeth Bowen's *The House in Paris*, the events of the past are fitfully revealed to the children Henrietta and Leopold, who knew almost nothing of the story beforehand, and yet it has affected their lives significantly up to this pivotal day, and will continue to do so. The past weighs on the current events of this novel, and the reader, like Henrietta and Leopold, discovers story information out of chronological order as the novel progresses. Some of the earliest contextual information that we receive in the novel, however, does not inform us about a piece of backstory, but rather tells us what will happen in Henrietta's future. There are four instances of prolepsis in the first chapter of *The House in Paris*, which allude to events that must occur after the story told in the novel ends. They concern pieces of information that Henrietta comes to learn, but she does not learn them over the course of the novel, so it must be afterwards. This makes them external, and partial, prolepses, as they occur outside the main part of the story and the time between them and the present moment is not all accounted for. The first prolepsis occurs when Henrietta and Naomi Fisher arrive at the Fisher house. In the moment, Henrietta makes a series of observations about the house. We are then told that "Henrietta heard later that the site was valuable" (Bowen 10). The novel does not contain a scene where Henrietta discovers this information. Indeed if we consider that adults are more likely to understand property valuation than an eleven-year old, then it is implied here that the revelation of that piece of information occurs years later. Certainly it is not part of Henrietta's free indirect discourse, which is tied instead to the present moment. Then there is a quick piece of prolepsis as ominous foreshadowing in the very next paragraph, when "Miss Fisher's key turned and she pushed the door open. Henrietta took a last look at the outside of the house, which she never saw in daylight again" (Bowen 10). This is a prolepsis despite the way it is phrased. The statement that Henrietta would not see the house in daylight again may be a negative one, indicating what will definitely not happen in the future, but it unequivocally implies that in the future Henrietta will leave the house after dark; that is a definite future

event. This is an internal and complete prolepsis, as we do see Henrietta leaving the house that evening, with Leopold and Ray Forrestier. It serves to indicate not just the fact that Henrietta will only be in the house for one day (but will not leave it during the daytime despite several attempts by her and Naomi to arrange a day trip in the afternoon), but also to indicate that as Henrietta's views of the outside of the house will change from daylight to darkness, the house will serve as a liminal space where Henrietta's view of the past, family, and life generally will change considerably over the course of the day. A kind of loss of innocence will occur, and the daylight picture of the house will never be seen again. This is not necessarily a bad thing, and the matter-of-fact tone of the prose suggests a non-judgemental narrative perspective; in general the novel's prose presents events in a minimalistic manner, leaving the reader to come to their own conclusions. The third prolepsis is comparatively mundane, as we merely find out that while in the present Henrietta does not know Naomi's age, this "turned out later to be about thirty-nine" (Bowen 12). Again, we do not see Henrietta learn this over the course of the novel. The fourth prolepsis is significant, however, in that it correlates with the second. It states that "to-day was to do much to disintegrate Henrietta's character" (Bowen 13). This prolepsis does not isolate a specific event like the others, instead its prediction encompasses the coming day as a whole, but it is still a thing that will definitely occur in the future, even if it happens over the course of several hours rather than instantaneously. It is a complete and internal prolepsis; we will read about the day that changes Henrietta's character over the course of the novel. The concept of an eleven year-old's character disintegrating may sound like a bad thing. However, this depends on one's interpretation of the words 'disintegrate' and 'character'. There is no question that some of the revelations of the day are upsetting - secrets are uncovered about an affair, a death, and manipulation. However, learning about this doesn't necessarily reflect badly on Henrietta. If one thinks that a person's character is a whole that should be maintained, and that any change in that would be a sign of moral corruption, then the statement about Henrietta and the events of the day could be seen as a negative thing, particularly if one takes disintegration to mean fouling or pollution. However, the statement becomes more neutral if one reads disintegration in its literal sense as a splitting, a diversification, a complication, which is what happens as one grows older. Henrietta's view of the world is no longer whole and simple, it has become complex. So, her character has not become worse, it has just become more nuanced and complicated as she has gained knowledge. So this disintegration of Henrietta's character would fit with the movement from innocence to

experience; this is not a bad thing, but merely a fact of life. At the end of the novel, Henrietta still acts her age by fidgeting in the cab and asking many questions of Ray, but she does have a new sense of responsibility as Ray implores her not to tell anyone what she has heard on this day. He is acknowledging that she has learned a lot and is giving her the responsibility to keep it quiet. The weight of this instruction causes Henrietta to take "a deep earnest breath" (Bowen 264), and she agrees. When this is settled and Ray asks her if she has all her things, she is "too much uplifted to tell him she [has] no handbag yet" (Bowen 264); she is uplifted by the new responsibility placed upon her, and partly also because of Ray thinking that she would have a handbag. She is getting older. Her character is incorporating more aspects, becoming less of a singular whole, disintegrating, on the way to the implied point later in life when she will know more about things like Naomi Fisher's age and the value of the house in Paris.

Bowen uses analepsis both in short form and long form. The middle section of the novel is one long analepsis, but it is preceded and succeeded by many brief instances of analepsis. Much of the information revealed is cryptic, constrained, brief, and incomplete, even near the end of the novel. Sometimes new information re-contextualises things that the perceptive and intelligent children remember from earlier in story time. This happens when Mme Fisher says to Henrietta, with Naomi present, that Max "broke Naomi's heart." (Bowen 45). After this is spoken, an analepsis occurs when Henrietta remembers how Naomi had looked when she had first met her that morning: "Miss Fisher's heart had been brittle, it *had* broken. No wonder she'd looked so odd at the Gare du Nord" (Bowen 46). In light of the information she has gained about Naomi's past, Henrietta now has a better understanding of her earlier impression of Naomi. This illustrates the nuanced way in which this novel uses analepsis; information is revealed gradually, and the past of the story becomes more clear as narrative time goes on. Henrietta's mind will flash back to her meeting with Mme Fisher much later in the novel, when Henrietta is speaking with Naomi and Leopold and hears Mme Fisher tapping three times on the ceiling from the floor above. The sound (Mme Fisher exercising power over the other characters even when not present in the room with them, making their conversation stop), and a brief flash of memory, interrupts a discussion about Leopold's parents. Unusually for this novel, the analepsis is rendered in parentheses: "Three sharp taps on the ceiling made Miss Fisher and Henrietta anxiously look up. (Henrietta, seeing the twist of incense, grey twilight across the foot of the bed)" (Bowen 216). That Henrietta's mind would so readily flash back to that earlier scene underlines the pivotal nature of the scenes in which Mme Fisher meets each of the children.

It also fits one of the general themes of the novel; that it is a "novel much preoccupied with repetition and return" (Corcoran 81). The past has a huge influence on the present in this novel; the actions of the children's parents have affected the courses of their lives. In the narrative structure of the novel as a whole, the past is at the centre, with its effects bleeding out into the present on either side of it.

2.2.2 Further examples from *The Sound and the Fury*

The return of past events at first not described fully (or at least in an understandable or conventional way) is also woven into the structure of another novel from the modernist corpus, *The Sound and the Fury* by William Faulkner. This is manifested in different ways through the novel. On a large scale, the sections of the novel are set during different points in time. The first section, at its beginning at least, occurs on 7 April 1928, while the events of the second section occur back on 2 June 1910, then the third section happens one day before the first, on 6 April 1928, and the fourth moves forward in time again to occur on 8 April 1928. Already there is a structural focus on nonlinearity, with implications for the meaning of the novel. By telling the story out of chronological order, the novel encourages us to consider the weight of the past on the minds of the characters in the present. Benjy Compson keeps returning to his childhood memories of his sister Caddy, while in 1910 their brother Quentin fixates on memories both from childhood and the more recent past. By having the narrative itself change back and forth from present to past, it makes those past events simultaneously held in the present by the reader in a way that mimics how present they are for the characters.

While the sections themselves are arranged in a nonlinear fashion, on a more fine-grained level, the narrative also moves backwards and forwards through time within each section. The most striking examples of this are in Benjy's section but it also occurs with regularity in the second and third sections. Benjy's section features some rapid changes between the present and several different points on a particular day in the past. Some instances of analepsis occur even in the middle of sentences as we see early in Benjy's section when he and Luster are at the branch. Luster tells Benjy to get in the water and Benjy does. He narrates:

> I hushed and got in the water *and Roskus came and said to come to supper and Caddy said, It's not supper time yet. I'm not going.* She was wet. We were playing in the branch and Caddy squatted down and got her dress wet and Versh said, "Your

> mommer going to whip you for getting your dress wet." (Faulkner 11)(Italics in all Faulkner quotations are in the original text).

The seven words that precede the italics describe what is happening on 7 April 1928, but then the action of stepping into the water causes Benjy to remember being in the same branch with his siblings when they were children. Specifically, in the two and a half italicised sentences, he recalls Roskus trying to get the Compson children to go back to the house. When the text returns to roman font with the sentence "She was wet" (Faulkner 11), the narrative has flashed back to some minutes beforehand on the same day, as the children are playing in the branch but Roskus has not arrived yet. These memories of childhood are instances of partial analepsis; there are many years between them and the present that are not narrated. Benjy has remembered a pivotal moment - Caddy refusing to go back for dinner, verbally defying the wishes of elder Compsons as she does many times in her actions - and then gone back further to account for how that point of conflict was reached. The narrative stays with this earlier part of the day for about a page, before moving briefly back to 1928 with Luster complaining about Benjy for three short paragraphs, and then the narrative moves back again to pick up in more detail the scene that was hinted at in the short italicised section before, with Roskus arriving to tell the children to come to dinner. This is still rendered as indirect speech, but with different wording: "Roskus came and said to come to supper and Caddy said it wasn't supper time yet" (Faulkner 13). The change is likely just for expediency, to let the reader know quickly exactly where the narrative has now moved to, describing in one sentence what had taken slightly longer before.

The use of italics makes it easier for the reader to note when analepsis and prolepsis occurs, although this merely indicates that a change has occurred, it does not designate which time is which, because the narration flashes back to several points in the past, and does not always return to the present between each, so the italics do not always correspond to the same point in story time. For uniform correspondence of typeface with story time, Faulkner's vision of the text being printed in multiple colours may help. As the Folio Society notes in the promotional materials for their limited edition of the book using this method, Faulkner had once "quickly jotted down eight time-levels in Benjy's section, 'just a few I recall,' and wished that it could be 'printed the way it ought to be with different color types"' ('The Sound and the Fury Folio Illustrated Book'). The novel is also published with multicoloured text online in the hypertext edition edited by R.P. Stoicheff et al. In standard editions of the novel, the italics denoting

analepsis and prolepsis are only used in Benjy's section, despite there also being instances of anachrony in the other sections. Perhaps this is merely acknowledging the stylistic barrier to entry that the Benjy section can be for readers. Even so, it is likely that with attention the points of chronological departure would be evident without the italics, even in mid-sentence, due to the contextual cues, in particular the changing companions assigned to Benjy, from Versh to Luster, or the presence of Caddy, who is gone from the house in 1928. In the particular example of Benjy stepping into the branch and the sentence moving into the past, the mention of Roskus tells us that an analepsis has occurred. The only issue would be the specific point in the sentence where the change happens, because part of the sentence could be read as a temporal overlap, with Benjy stepping into the branch both in the past and the present. However, he probably only needs to "hush" in 1928; that event anchors the first part of the sentence in the present. In any case, Faulkner's italics make the moment of departure into analepsis quite clear, and we can see an evocative expression of how the past and present are being held simultaneously by Benjy.

A return to the past or a surfacing of revelatory information from the past can also be identified in the reader's experience of reading the novel from beginning to end. As memories interweave with the present narration in Benjy's section, and as the novel's chapters move backwards and forwards in time, the reader is also brought back to the past of their experience with the novel, as the later sections elucidate the events that were being described in the first section, and add significance to them. We are encouraged to simultaneously remember that first section, and to see that it had given us the main points of the story all along. The elucidation comes from the narrative, but Benjy's narration is revelatory in itself, in its commitment to stylistically representing the instantaneous journey of a mind into the past when prompted by a sensation, a sound, a word. Faulkner's use of analepsis, his lurching of the narrative from one point in time to another, causes past and the present to be held together, in the novel as a whole and particularly in Benjy's section, embodying the simultaneity of experience discussed by Bergson and the other time philosophers of the early twentieth century.

2.3 Stream of Consciousness

This project defines stream of consciousness as prose that reports a character's thoughts directly and continuously, often ignoring rules of grammar in order to do so. For comparison, free

indirect discourse is prose that still uses a separate narrator and third-person sentences, but in which the words are affected by the biases and perspective of a particular character. Unlike anachrony and narrative levels, stream of consciousness is not a technique that has been used for centuries in fiction. The term itself was first published by William James when writing about the workings of the human mind, although he more frequently used the phrase *stream of thought*. Shirley Rose cites James saying that "consciousness . . . is nothing jointed; it flows. A 'river' or a 'stream' are the metaphors by which it is most naturally described. In talking of it hereafter, let us call it the stream of thought, of consciousness, or of subjective life" (Rose 367). James uses the exact three-word phrase *stream of consciousness* only once in the main text of his 1890 book *The Principles of Psychology*, and then uses it in a chapter heading in 1892's *Psychology: Briefer Course*; in the main text of both he usually uses the term *stream of thought*. However, the concept and the quote that Rose selects help to describe how the technique is used in fiction; it is the continuous reportage of thought, where one observation or memory flows into the next. James uses this kind of description because, he believed, in the human mind constantly "consciousness of some sort goes on" and "within each personal consciousness states are always changing" (James 152). The subjective experience of consciousness is different for everyone, and it is never the same from moment to moment, it is constantly evolving (in a continuous duration, Bergson would argue); the prose style used in some modernist fiction attempted to relay that subjective experience. The idea of stream of consciousness was first applied to the analysis of fiction in 1918 by May Sinclair, while discussing the work of Dorothy Richardson. Sinclair says about *Pilgrimage* that "in this series there is no drama, no situation, no set scene. Nothing happens. It is just life going on and on. It is Miriam Henderson's stream of consciousness going on and on" (58). This project identifies free indirect discourse rather than stream of consciousness in *Pointed Roofs*. Miriam is not the narrator in this novel; she is the focaliser, but there is another entity narrating. The text is not an uninterrupted litany from Miriam's brain, as we see in the first two sections of *The Sound and the Fury*. Miriam's thoughts are mediated, carefully arranged for us, and told in the third person, by the narrator. This third-person narration is still very close to Miriam and influenced by her feelings and opinions, making it free indirect discourse, but not stream of consciousness. Sinclair was correct though in identifying Richardson's prose as getting closer to the character, closer to human psychology, than the usages of free indirect discourse that came before it in history. Furthermore, Sinclair identified that the critical tools of the nineteenth century were

no longer adequate for studying contemporary work, saying that critics needed to "throw off the philosophic cant of the nineteenth century" because "it is absurd to go on talking about realism and idealism" (57). Modernist fiction required a different approach, because it was doing something different. It was pointless to discuss realism when large parts of a novel occur within a character's mind.

Sinclair and James were writing about the stream-of-consciousness technique at this time because it was only starting to be used, and critics needed to create a way to discuss what was going on in fiction. The nineteenth century had seen plenty of novels that used free indirect discourse, from Austen (Gunn 35), through George Eliot (Fludernik 92), and on to the bridge into modernism that was Henry James. These writers showed the reader the opinions and biases of their characters, while retaining a degree of omniscience, third person perspective, and fidelity to grammatical rules. Stream-of-consciousness narration tends to disregard those qualifiers, and simply present the thoughts of a character, even if they break the conventions of sentences or paragraphs, or jump frequently from subject to subject. David Herman notes that the modernist period changed how novels were narrated, as

> for many historians and theorists of the novel, the modernist novel marked (for better or worse) a turning point in the development of methods for representing fictional minds. For these commentators, despite their surface differences modernist authors shared a common project: the project of foregrounding, whether formally or thematically (or both), the nature and scope of the experiences falling within the domain of the mental, including sense impressions, emotions, memories, associative thought patterns, and so on. (243)

Stream of consciousness allows those impressions to be reported more faithfully, although free indirect discourse still comes close.

There must be a reason for this change, for the need to represent the workings of the mind in a more direct fashion. There is something to the idea of the impressionist turn, of art generally being used more to convey subjective perspectives, in which case turn-of-the-century fiction was catching up with what visual art had been doing thirty to forty years previously. It should also be noted that technology may have had an influence on the early usage of stream of consciousness, like it influenced the new representations of temporality in modernist fiction. The telephone made communication across distance almost instantaneous, allowing people to

speak instead of writing letters; it is possible that this rapidity allowed for more communication that was closer to the speed of thought, contrasted with the slow deliberate sentence-making involved in composing letters, and that this familiarity with speed encouraged fiction writers to attempt to convey the speed of thought in prose. Even before the telephone, however, the technological and economic constraints of the telegram were making people write sentences differently, diverging from proper grammar in favour of concision. The staccato prose style of telegrams is certainly influential on the series of rapid bursts of short thoughts that make up stream-of-consciousness narration. In *Ulysses*, as Bloom walks past the postal telegraph office his thoughts take the form of sentences that omit first a subject, and then a predicate, in a style similar to the necessarily short sentences of a telegram: "Could have given that address too. And past the sailors' home" (Joyce 58). It is not unusual for Bloom's thoughts to leave out the first-person pronoun, or other parts of the sentence: "Rather warm. Tea. Must get some from Tom Kernan. Couldn't ask him at a funeral, though." (Joyce 58) These fragments of sentences create some sense of the speed of thought which seems to be important for the narration to capture, at times. Fidelity to unfiltered thought was important as well as capturing the speed of it, and technology and art were not the only influences upon this at the turn of the twentieth century.

This time period saw the public having a greater interest in how the human mind worked, due to the rise of psychoanalysis as a discipline. Of course, we partly have Freud to thank for this, and even though his ideas are outdated now, their influence at the time on western art and culture is significant. It is overtly evident in Fitzgerald's *Tender is the Night*, with Dick Diver working as a psychoanalyst and his marriage with Nicole emanating from a doctor-patient relationship, but psychoanalysis also affects how the mind is represented in fiction in terms of the nuances of the style of narration. Erik D. Lindberg highlights the link between Freud's techniques and narrative generally, stating that "unconscious, as it has come to be employed, is, in effect, a narrative, a mode of emplotment" (67). A key part of Freud's treatment of patients was taking their 'disordered' thoughts or images and rearranging them into a coherent narrative so that a trauma could be logically worked through. The end result was a narrative, which Freud would impose on patients even against their will, as Elaine Showalter notes in the case of 'Dora,' when Freud "never understands her story at all and simply tries to bully her into accepting his version of events" (27). So, often negatively, narrative strategies from fiction influenced the practice of psychoanalysis, just as psychoanalysis went on to influence literature.

We can see the influence of psychoanalysis in the nonlinearity of narrative time in these novels. Their writers wanted to move beyond the conventional linear (if still complex and housing undertones of the unconscious) narratives and prose styles of their forebears. "In *Ulysses* Joyce created a dramatic interruption in the forward movement of narrative time. . . . Virginia Woolf believed that it was the writer's obligation to go beyond 'the formal railway line of a sentence"' (Kern 31). Psychoanalytic theory was one of the things that gave them the tools to do this, and in so doing more faithfully represent the working of the human mind, including "the temporal distortion of memory that comes from 'a process of fragmentation in which chronological relations in particular are neglected.' In *The Interpretation of Dreams* Freud surveyed how the sequence of experiences in the course of our conscious life is rearranged to suit the needs of the dreaming mind" (Kern 31). Stream-of-consciousness and free-indirect-discourse narration endeavours to represent cognition, and part of that is engaging with this associative temporal distortion. Subjective narration allowed modernist writers to break away from the formality that Woolf mentioned, and instead depict messy interior minds that were all the more interesting for their messiness, their fragmentation and nonlinearity. The human mind shifts back to the past so frequently because, if we are to believe Freud (or, more essentially for this argument, if modernist writers were to believe Freud), the past is so important to us, particularly scenes from childhood. Subjective narration is a perfect vehicle for this obsession and the temporal distortion that it engenders. The digging up of the repressed and the fixation on a particular moment are visible throughout modernist narratives, from Benjy Compson's mind repeatedly returning to memories of his sister when they were children, to Lily Briscoe in the final section of *To the Lighthouse*. The text repeatedly dives from the narration of the current moment into memories focusing on Mrs. Ramsay, at the house ten years before, and these memories have a huge influence on Lily's thoughts, feelings, and perception of the present day.

2.4 Selection of Modernist Corpus

The corpus of modernist fiction for this project is intended to be representative of a range of modernist fiction in terms of prose style, narrative structure, and date of publication, while working within the constraint that is the requirement of manual annotation. The texts have been selected with a focus on novels that experiment with narrative time, but there is a range of

applicability with this as well, as some of the texts do not experiment with nonlinear narrative time to any significant degree. This ensures that while there are ample narrative features to annotate, the corpus is not skewed to feature only texts which shift backwards and forwards in time with radical frequency. The frequency with which experimental narrative techniques are used is one of the factors under consideration in the quantitative analysis of the corpus, as is where they occur in the overall length of a fiction work. Therefore it is important to include a selection of novels which appear to be different in this respect (or to exist on a spectrum in relation to each other in terms of how they use these techniques) in order to determine whether this is actually evident in the data, or whether there are surprising similarities (or indeed different discrepancies than what had been expected) between texts. By the same reasoning, the texts included are also varied in how much they feature the other narrative features that are being annotated; some texts utilise stream-of-consciousness narration, while some do not. Some have narrative levels, some do not.

Having said that, the corpus is still relatively canonical. It does at least move away from the mid-to-late-twentieth century conception of modernist fiction as being a canon of male writers with the inclusion of Virginia Woolf and/or Gertrude Stein because they just could not be left out. Dorothy Richardson and Elizabeth Bowen are also present, although they are not little-known names in 2021 and receive plenty of attention in modernist conferences and publications. In order to be present in this corpus, writers have to be read widely either in their own time or now (or both), purely because the purpose of this project is not to re-address canon formation (much as that is a worthy and necessary pursuit), but instead to focus on narrative, how it is variously used and how this has changed over time - instead it uses material that has a lot of critical writing about it, and is easily obtainable in digital format. Early in the project, it had been thought that automatic text processing may be used in addition to manual encoding to compare narrative patterns with basic linguistic and lexical patterns. This meant that it was deemed important that the words of the novels be analysed in the language in which they were first composed. This results in a corpus written entirely by authors from Ireland, Britain, and the United States. They are also all white authors, and tend to be from wealthier socio-economic classes; these are problems with modernist studies generally, as the field historically focused on these kinds of authors, although that is changing. It is noted that this corpus did not need to be as homogeneous as it is, despite the constraints. The construction of any corpus is a wielding of power, and in this case that power would be used differently if I were beginning

the project again. One of the many problems with canons is that they influence the selection of corpora, and so influence the data that results from processing those corpora. One can push back against this bias, and I would do so more forcefully I were beginning the project again. To return to the topic of language, manual encoding and analysis of the data gleaned from the encoded text became the focuses of the project, but it was still important to select texts that were not in translation, for, as we will see in later chapters, the spot in a sentence where a temporal transition occurs is an important consideration, and that placement would change if a sentence had a different syntax in its original language. If the project were to be begun again the contents of the corpus might be different, but this is the corpus that exists based on the best considerations at the point in the project when it was selected.

For a large-scale corpus analysis project in which all of the text encoding was done automatically, a corpus that was as large as possible would be desirable; this project is not that. It cannot take every piece of fiction published between for example 1900 and 1939 and available on Gutenberg, Haithi Trust and Google Books and run them through a program. Because the encoding is manual, the project has to be more selective. Using contemporaneous best-seller lists to determine what novels were popular in the early twentieth century was explored (using the American periodicals *Publisher's Weekly* and *The Bookman*, both of which predate the *New York Times* best-seller list, which only began in 1931), but rejected because experimental fiction does not feature prominently in them. With the exception of Edith Wharton, modernist writers do not tend to feature prominently in yearly nationwide lists, which are instead dominated by writers such as Winston Churchill (the novelist not the prime minister), Sinclair Lewis, Agatha Christie, and Daphne du Maurier. This is not a comment on the merit of those books, but this project is focused on different things than what they offer. So, rather than taking a ready-made corpus of best-sellers or of all books published in a certain time, this project must be selective, and conscious of its scope with one manual encoder, and so focus on a range of works which fulfil the above criteria of engaging to various degrees with nonlinear time, subjective narration, changes in narrative levels.

In detail the corpus is:

***Three Lives*, Gertrude Stein, 1909**

It is important to include Stein for her experimentation with the poetic quality of narrative prose, including significant use of repetition. This book in particular engages with this prac-

tice while still adhering to novelistic conventions enough for it be encoded in a similar way to the other texts in the corpus, which would not be possible with something like *The Making of Americans* for example.

***Pointed Roofs*, Dorothy Richardson, 1915**

The inclusion of this novel is vitally important for its use of free-indirect-discourse narration throughout the novel as well as reasonably frequent instances of analepsis within chapters. It is also historically significant for having used such subjective narration before its more famous uses in the novels of Joyce and Woolf, and for being part of the series, *Pilgrimage*, about which May Sinclair applied the term *stream of consciousness* to fiction for the first major time.

***To the Lighthouse*, Virginia Woolf, 1927**

This novel was perhaps the most important to include in this study due to its disruption of narrative time, not only in the middle section, but also quite frequently in the narration in the rest of the novel. If the focus of the thesis was only subjective narration then *Mrs. Dalloway* or *The Waves* would have been very significant to consider, but for the focus on narrative time *To the Lighthouse* is the most appropriate given its obsession with the passage of time and its engagement both with speculation and memory over a span of ten years.

***The Sound and the Fury*, William Faulkner, 1929**

This novel is also very important to include for its radically frequent use of anachrony, sometimes even in the middle of sentences. this is combined with a chapter structure that also moves backwards and forwards in time, and characters who, either knowingly or unknowingly, are obsessed with their family's past. It also features more stream-of-consciousness prose than any of the other novels here.

***Tender is the Night*, F Scott Fitzgerald, 1934**

This text features very little stream-of-consciousness narration and has less small-scale sentence-level analepsis, but the entire subject matter of the novel is affected by the setting of its middle section eight years before the events of the first section of the novel. This returning of a buried

memory from the past is influenced by Freud, and the characters overtly discuss him also.

***The House in Paris*, Elizabeth Bowen, 1935**

Bowen's novel is a useful counterpoint to Fitzgerald's because its overall structure is quite similar. It too has three sections, with the first and third sections occurring in the present and the middle section happening some years before. However, the novel's execution is quite different. Its style is more subtle, and it does not feature the characters explicitly discussing the philosophies that influenced the book's writing, as we see in *Tender is the Night*. Instead, Bowen's characters tend to speak cryptically and hold back information from each other. This serves to underline the constant influence of the past over these characters, particularly how it restricts their actions in the present.

2.5 Conclusion

The narrative practices of modernist fiction respond to the times in which that fiction was produced. The philosophies of Bergson, James, and Husserl had an effect, directly or not, on the writers of these novels. The experience of Bergsonian duration is approximated by stream-of-consciousness narration. Meanwhile it is actually Bergson's other concept, of how we get away from duration when we try to think about time and instead create simultaneity, that is even more evident in modernist fiction. Holding multiple moments in time in mind simultaneously is achieved in narration through anachrony. Discrete moments from the past, present, and future of a text's story time can be placed alongside each other. This is done with great frequency throughout the novels in this corpus; we will see just how frequently in Chapter 6 of this thesis. This was allowed by the fact that the way people thought about time changed in the early twentieth century.

New technology also changed conceptions of time and space. Travel by railway had already collapsed distances in the nineteenth century, and now motor cars and aeroplanes were continuing that. Telegraphy had made it possible to communicate with people across great distances very quickly; telephony made this instantaneous. Faster and briefer communication made fiction also engage more with speed and brevity, evidenced in the staccato non-sentences of stream of consciousness, as well as the willingness to jump between moments in time instantaneously through

anachrony. As this was happening, timekeeping was becoming more standardised through the introduction of Greenwich Mean Time and public clocks set to that, as well as the increasing adoption of wristwatches. This created an unconscious conflict between regimented, linear, public time, divided up (spatialised) into seconds, minutes, hours, and so on, and the private subjective experience of time as felt by the individual. This subjective experience could be either felt unconsciously as duration with time flowing as a continuum, in which divisions of minutes and seconds and the concept of being on the "correct" time are all irrelevant, or as simultaneity, where the linearity of one prescribed second coming after another becomes less meaningful when one is actively recalling several different seconds from the past at once. Duration and simultaneity are better metaphors for the lived experience of time than the artificial representations made by standardised time.

Analepsis and prolepsis are key expressions of the feeling of simultaneity in modernist fiction. We see this in our examples from *The House in Paris* and *The Sound and the Fury*. The narratives in these texts transition backwards and forwards in time frequently in order to convey the power that the past holds over the present for their characters. They simultaneously hold moments from the past in their minds as they are acting in the present, and anachronies show this. In modernist fiction we also see that subjective narration can come close to representing the human experience of duration and not just simultaneity. In modernist fiction, subjective experiences of temporality are converted into narrative, using literary techniques old and new in an idiosyncratic way, inspired by the philosophy and technology of the early twentieth century. This chapter has discussed these ideas based on more traditional literary readings of the texts; it will be the task of Chapter 6 of this thesis to explore the temporal narrative features in these texts using a quantitative approach.

Chapter 3

Days of Future Past: Hypertext Narrative

3.1 Introduction and context: What is hypertext fiction?

This chapter is concerned with the narrative aspects of hypertext fiction, and will address these in a traditional qualitative literary context, as opposed to a quantitative study. This shows what can be done with those methods, before the thesis moves on to show the insights that can only be obtained by its specific combination of distant and close reading. This thesis will show that some modernist and hypertext fictions disrupt their narratives to very similar degrees, and this is in order to convey subjective experiences of temporality. To ensure the correct basis for that, we must analyse hypertext narratives on their own using more traditional methods first. This chapter will address the construction of the hypertext corpus for this project, how anachrony and personal narration function in hypertext fiction, how this genre has been influenced by modernist and postmodernist fiction, and the question of whether it is a contemporary continuation of modernism (if it is even possible for modernism to continue). Firstly we will briefly define hypertext fiction, with the intention that this definition will further illuminate the selection of the corpus.

Hypertext fiction is a subgenre of electronic literature, which is literature that is made with and designed to be read on electronic devices. Rettberg has defined the overall genre as "new forms and genres of writing that explore the specific capabilities of the computer and network

literature that would not be possible without the contemporary digital context" (2). The medium is intrinsic to these texts. They cannot be read in any other fashion without significantly altering the meaning that they convey. Electronic literature encompasses many different kinds of interactive and non-interactive pieces (to use slightly disputed terminology), including poetry, audio-visual pieces, apps which require the user to walk around, digital projections and so on. The combination of factors that makes hypertext fiction distinct within this milieu is that it has some kind of narrative, it is usually based on written text which is read (although it can incorporate audio-visual elements to varying degrees), and, most importantly, navigation of the piece is based on clicking hypertext links. The reader must engage with a link in order to read another lexia, or page, of a hypertext fiction. There may be a selection of links for them to click, or only one, but the link is still there, forming an edge between two or more nodes in a networked structure.

The term *hypertext* was coined by Theodor H. Nelson in the 1960s. George Landow quotes Nelson explaining hypertext as "non-sequential writing-text that branches and allows choices to the reader, best read at an interactive screen" (Landow 2-3). Landow elaborates with his own definition of hypertext as "text composed of blocks of text - what Barthes terms a lexia - and the electronic links that join them" (3). Again we see how the link is integral. The link is the specified connection between two pages or documents, allowing a reader to move from one page or document to the other by clicking a particular word or spot. This bridging creates the meaning engendered by the association between multiple documents which is the great power of hypertext. Landow and Nelson are talking about hypertext generally. That is, linked documents accessed electronically, which were often shared over the early internet from the 1960s through the 1980s. Hypertext began to be used more widely from 1993 with the release of HTML, or Hypertext Markup Language, which in 1995 became the primary markup language used for documents on the new World Wide Web, through the Hypertext Transfer Protocol, or HTTP. Hypertext literature predates the web, with texts such as Judy Malloy's *Uncle Roger* emerging in the 1980s. Hypertext literature uses the technology of hypertext to create stories in which the pages are connected by hyperlinks. The early authors of hypertext fiction took technology that was initially primarily developed for drawing connections between research papers, and created narratives out of it. From the mid-1990s HTML was repurposed to make hypertext fictions, as we see with *Twelve Blue* and *my body - a Wunderkammer*. These kinds of texts would not have been possible without the technology. In this sense there is a

sort of technological determinism happening, whereby the emergence of the technology for a different purpose created the conditions for people to use it to create new kinds of fictions. The medium created new possibilities which demanded to be explored. The texts in this corpus do that. This corpus captures a sample of the history of the genre, from the mid 1980s up to the 2010s. To this we now turn.

3.2 Selection of the hypertext fiction corpus

3.2.1 *Uncle Roger*, Judy Malloy, 1986

This text is included because it stands as an early example of a fully-formed long hypertext fiction. It is fragmented, with a narrative that emerges as the reader spends more time engaging with the text. *Uncle Roger* is divided into three sections, called 'files', each of which tell a part of the story using a different technique. File 1 covers one night, at a house party. File 2 begins at a different party, in a hotel, but jumps to several other points in time. File 3 relays the interweaved memories and dreams of one person. While the story is all told through text, the three files feature increasing uses of icons in their interfaces. In File 1, the reader moves to a new lexia by clicking a word from a selection at the bottom of the screen. In File 2, the reader progresses by clicking one of three images on the screen. Then in the third file, an array of small icons representing the buttons of a computer keyboard function as the means of navigating from one lexia to another.

The divided and multilinear hypertext form suits the subject matter; the fragmentation allows for the perspectives of multiple characters to be relayed. You might jump between characters inadvertently, which works because it is part of the confusion of a busy party scenario, or the layers of memories that the mind holds.

Malloy's text is extant on the web, replicating the original version of the work, which predates the world wide web by nine years. The original was made with UNIX and BASIC. The replication is easy to interact with in much the same manner as originally intended. Not all older hypertext fictions are so easily accessible. Michael Joyce's *afternoon: a story*, from 1987, is only available on either CD-ROM for older versions of Windows, or on USB stick for Mac. Rettberg notes that an

> important concern in the field is the effect that using proprietary technology and software can have on projects developed in those platforms. Once its corporate owner does not support a platform, works developed in that platform may become obsolete. Some of the classics of 1990s hypertext fiction made in Storyspace and interactive poetry made in Shockwave are now functionally inaccessible. In some cases, publishers of works of electronic literature have even held onto copyright and refused to let even the authors republish their own work, long after they have discontinued support of the work (12-13).

In this context, the fact that Malloy's text remains accessible is excellent. One of the current web hostings of *Uncle Roger* also features notes on how the work was adapted from the original into its current web version, as well as an author's introduction by Malloy, which are both useful for understanding the work in both its technical construction and its composition, and how Malloy reflects on that.

3.2.2 *Victory Garden*, Stuart Moulthrop, 1992

Victory Garden is included as one of the foundational works of hypertext fiction, published by Eastgate and composed on their Storyspace platform; this was the flagship method for producing long hypertext fictions in the late 1980s and early 1990s. It is the only text in the corpus from Eastgate; despite the difficulty of reading these texts on current technology it was important to include at least one of them, because of their long-lasting influence on the genre. Much has been written about *Victory Garden*, and Moulthrop's critical writing has also been significant in the history of the study of hypertext fiction. He was writing in 1991 about how to reconcile what hypertext is, and how it works as fiction. Additionally, Moulthrop, Michael Joyce, and Shelley Jackson are the authors who are consistently mentioned in discussions of early hypertext fiction; it is important to include these three writers in the corpus.

Victory Garden is also the most overtly political work in the corpus, which adds to the diverse subject matter of the corpus. Moulthrop's piece argues that the Gulf War in 1991 had an inherent strangeness, with Americans both at home and deployed in the Middle East feeling disconnected from the purpose of the war. The text conveys this through its descriptions of confusing and overwhelming information being consumed through several forms of media by characters in the US, and also by having one of its characters working in an army mail room in

Riyadh, away from the fighting in Kuwait and not allowed to have a direct perspective on what is actually happening (until her facility is hit by a bomb).

Like many of the texts in the corpus, it is read in a nonlinear fashion, and is one sprawling network of lexias. Moving to another page is slightly oblique but ultimately quite simple: the reader must click on one of a small number of words on each page which can take them to another page. The words that do this are not highlighted or otherwise indicated; the reader has to click around on words that they think would be significant enough to act as a link.

3.2.3 *Twelve Blue*, Michael Joyce, 1996

Michael Joyce's *Twelve Blue* is included in the corpus as an important transition point from the proprietary platform Storyspace to works being hosted on the web as their first form of publication. This text is the earliest text in the corpus after the creation of the world wide web. It is also more visual than Joyce's earlier work *afternoon, a story*, as *Twelve Blue* uses coloured threads on the left-hand side of the screen to denote different strands of the story, while the main body of each lexia is printed and backgrounded using shades of blue, whereas the lexias of *afternoon* were presented in stark black and white with no pictorial embellishments, only the text. The focus of *Twelve Blue* is still the written word though, which is good because language is the base unit of what this project is analysing; narrative anachrony begins at the sentence level and is built upwards from there into sections of novels.

3.2.4 *my body - a Wunderkammer*, Shelley Jackson, 1997

my body - a Wunderkammer by Shelley Jackson features imagery as a means of navigation; each lexia is associated with a part of the body. However, the main focus is still text, and it has plenty of this to analyse. The text features more a personal writing style rather than the more distant *Twelve Blue*, or that of the omniscient narrators of *Victory Garden* and *Uncle Roger*. This makes it important to include as part of a range of writing styles in order to see how analepsis and prolepsis manifest differently in different kinds of writing. This is especially significant for the hypertext corpus, as showing where anachronies are distributed over the length of a nonlinear hypertext will not be possible as it was with linearly-read modernist novels. Chapter or section changes do not form anachronies, but instead each hypertext lexia is its own section, because one is unavoidably jumping either backwards or forwards in time when a link is followed

to a new lexia. This makes the annotation of anachronies on the sentence level is even more important in the hypertext corpus.

3.2.5 *The Jew's Daughter*, Judd Morrissey, with contributions from Lori Talley, 2000

Morrissey's text is included as an example of the kind of Flash-based works that were prominent in electronic literature around the turn of the millennium. Unlike some other Flash works which include videos and audio (as the software was designed for animation), *The Jew's Daughter* works only with text, which makes it useful for comparison with the other works in the corpus. While it does not have animated pictures or video, it animates words in a way. In *The Jew's Daughter*, the reader still points the cursor at a word in order to progress, but instead of changing to a whole new lexia, only some of the words change each time, while the rest of the page remains the same. This results in a slowly evolving text, and provides a counterpoint to the way that the other texts in the corpus function. It also makes the reader consider whether, if only some words change, the page is the same page or not; does changing a small part of the whole alter the meaning of the whole? For the purposes of encoding, each change must be treated as the creation of a new lexia; as such each encoded page must be copied, and changes made to the relevant parts.

This particular work is also very useful as an example of a hypertext fiction not only engaging with modernist aesthetics, but directly referencing a key modernist text, James Joyce's *Ulysses*. As such it is relevant to the argument for some hypertext fiction being a kind of continuation of modernism. This is complicated by the fact that because *The Jew's Daughter* is twisting a modernist text using a new medium, it could be considered an example of playful, intertextual postmodernism.

3.2.6 *Voyage Into the Unknown*, Roderick Coover, 2008

Coover's work features an increased use of pictorial imagery, which functions to situate the characters in the physical space of the landscape, with the characters' progress on their journey represented by the movement of icons from left to right on the screen, and their change in elevation as they traverse mountains and gorges represented by the icons being placed at various vertical points on the screen. The graphics also represent time, with time advancing as the reader

moves from left to right. Icons detail what kind of information will be conveyed by a lexia - from journal entries to notes on particular peaks. Apart from this, the imagery creates a kind of mood, but it remains the words that are telling the story. This text also adds more variety in terms of genre and style of writing, being a largely epistolary story told from the perspectives of multiple people on a mapping expedition in the American west in the nineteenth century. These competing and fragmented narratives from different diary-writers show the delusion and myth-making of colonial expansion.

3.2.7 *Seed*, Joanna Walsh, 2017

Seed is included as an example of a contemporary hypertext. The work uses graphics of plant vines for navigation and illustration, and these carry some semantic meaning, with different coloured vines representing different strands of the story, while the story is still all told with words. The introduction has to be read first, after which about a third of the lexias become available, and these can be read in any order. At any time the reader can zoom out and see a map of the whole work. However, graphical depictions of threads connect the lexias in a line, and one can keep clicking the next lexia in the line from the end of the lexia one is currently reading. These factors encourage a linear reading. When a particular lexia is read, "Radio Midnight," the lexia deemed last in that part of the thread, more of the lexias become unlocked, for the reader to read in their specified order or in any order determined by the reader. This process is repeated when "Thunder" unlocks more lexias, and then "Train Dream" unlocks the final few lexias. The successive unlocked sections correspond to the months in which they are set: June, July, August, and September 1988. This gating of the sections further encourages a linear reading of the text.

It is noted that two print editions of *Seed* have been published in 2021 by No Alibis Press. The standard paperback edition features the whole text printed in the same order in which one would read the electronic version if one progressed through it linearly from beginning to end. The limited edition set includes the paperback edition along with seven chapbooks, corresponding to the seven thematic vines or threads into which the electronic version could be divided. These two editions present different perspectives from which to reflect on the original electronic text. The more widely-available paperback makes mandatory the linear reading which the electronic version encourages but does not mandate. In the original electronic edition one can still choose

to click and read lexias in many different orders. The limited edition set, with the chapbooks reminiscent of texts like B.S. Johnson's *The Unfortunates*, allows one to read the separate threads in any order, but still prevents one from reading the individual lexias (or, perhaps more appropriately for print, we could call them segments) in any order. One must begin an individual chapbook at its beginning and follow that thread linearly to its end. Both editions encourage linear readings, either of the individual threads or of the whole text. The fact that a linear reading is also encouraged by the electronic version suggests that this may be the definitive way to experience the text. However, the options provided to the reader to create their own order remain an important part of the electronic version, and help to evoke the dream-like nature of the coming-of-age story being presented.

The electronic version of Walsh's text takes advantage of how the kinds of computers we use has evolved over the decades, as it is intended to be best experienced on a mobile phone or tablet computer because this allows the reader to touch the screen to navigate the work (the print editions introduce different kinds of touch: the turning of pages and shuffling of chapbooks rather than the swiping of a screen). Along with these innovations, there is still plenty of text to analyse, so the work fits with the rest of the corpus, and brings it up to recent times.

Reconstructing Mayakovsky by Illya Szilak, *Digital: A Love Story* by Christine Love, and *Gaffe/Stutter* by Whitney Trettien were previously considered for this corpus, but they each have elements that make them unfair to compare to the other texts in the corpus, because either visual or graphical or game-like elements are too integral to how they function; they cannot be analysed purely for their language.

3.3 Narrative techniques in hypertext fiction

Hypertext fiction exists within a literary context, and it shares some narrative strategies with genres of fiction that came before it, and also deviates from its predecessors in some ways. Modernist and postmodernist printed fiction both bear comparison to hypertext, and the degree to which one may be more relevant than the other will be argued in this chapter. Similarly, concepts from narratology - a field that emanated from structuralism - can be applied to hypertext works, and so can ideas from post-structuralist theory. The genre also breaks from both of those theories in significant ways; narrative theory does not apply to hypertext fiction

in the same way that it did to modernist fiction, and hypertext fictions may resemble certain post-structuralist concepts like Deleuze's rhizome, but they do not form a perfect decentred network, there is always some form of hierarchy.

3.3.1 Anachrony

With that said, all of these similarities and differences are worth exploring. The first to which we turn our attention is how hypertext fiction uses Genette's anachronies - analepsis and prolepsis. These features cannot work in the same manner that they do in printed fiction when a hypertext work gives the reader multiple links in each lexia from which to select a path of progression, and this is the case in most hypertext fictions. Anachronies are still present though, both on a sentence-to-sentence level within lexias, and arguably between lexias, with each link acting as a bridge to either an analepsis or prolepsis.

In an anachrony, the transition from one moment in a story to another happens in an instant. It can happen between one sentence and the next, or even within a sentence. As a result, there is nothing stopping this from happening within a hypertext lexia. And indeed we see this occurring many times in the corpus, as in *Twelve Blue* when we see the character Javier in the present remembering telling a colleague about the first time he saw a dead person: "He remembered the first time he saw a dead man, really saw death. It was a story he often told. This morning he had told it to the new resident" (Joyce). In this example, one instance of analepsis begins with "the first time" and ends at the end of that sentence, because the next sentence describes a habitual action rather than a past event. The narrative then returns to analepsis with "This morning" because Javier is remembering the conversation from that morning. This kind of weaving between past and present is much like that found in modernist fiction, and fiction generally. Hypertext is not unique in this respect, which is good because it makes it comparable to other genres of fiction; the same narrative strategies are evident.

Often the cues to the reader that an anachrony is taking place are linguistic; the use of a particular tense can indicate the beginning of an anachrony.[1] These cues can be looked for

[1] Although, in some of the most exciting uses of the technique, in both modernist and hypertext fiction, the transition is not indicated by a change of tense, and the reader must attempt to keep up with the sudden change in story time. Which is not to say that anachronies that clearly signpost themselves are not exciting, for example it can be thrilling to follow a past perfect-tensed sentence into a memory of Miriam Henderson in *Pointed Roofs* (particularly when the present moment for her is a mundane task like cleaning or eating a meal. Analepses for

as effectively in hypertext as in any other genre of fiction. The use of the past perfect tense can indicate the transition of the narration into analepsis. As is the case with many of these narratological and linguistic criteria, this rule does not always apply, it is merely one useful tool for identifying analepsis, and is worth mentioning here in order to illustrate exactly how analepses can occur at the beginning of a new sentence, or in the middle of one. There is not a simple correlating change of tense for prolepsis. If a text is written in the past tense it will usually remain in the past tense for instances of prolepsis, with the addition of a specific reference to the fact that the events in the prolepsis are occurring years later (for example). The text will not switch to the future tense because the future tense is always a projection forward from the present moment, whereas in a prolepsis the narrative is fully jumping from one moment to another that is measurably later in chronology; the narrative is immersed in the new moment, it is not a projection. It is a new present, in the narrative, even though we have moved to the future in the story. This is somewhat like the concept of a decentred rhizomatic text, where the reader is constantly creating a new centre based on the current focus of their attention at each passing moment.

By Genette's theory, the term *anachrony* does not just describe the moment of departure, it envelops the entire trip backwards or forward in story time. This is clear in the necessity for delineating partial and complete analepsis; these terms denote spans of narrative time, and describe whether an analepsis ultimately rejoins the original point of departure or not. Correspondingly, an anachrony in a hypertext fiction is not just one point between or within sentences or lexias, it can encompass several sentences or paragraphs within a lexia, just not over several lexias.

Lexias are simultaneously separate and connected. They do not, however, flow from one section to another like a narrative in a printed book. The main question here is whether the jump from one hypertext lexia to another lexia that occurs at a different point in story time counts as an anachrony. Before we answer this question we need to determine what a hypertext link is, in narrative terms. George Landow sees the link as the defining characteristic of hypertext. He writes that "links signify coherent, purposeful, and above all useful relationships. From which follows that the very existence of links conditions the reader to expect purposeful, important relationships between linked materials" (153). Landow alludes to one way that this occurs when he talks about the "inherent human ability to construct meanings out of the kind of discrete

her tend to be memories of something meaningful, that have an emotional resonance).

blocks of text found in an assemblages of linked lexia" (204). As a reader progresses through a hypertext, this inherent ability allows continued reading to establish "the essential coherence of the link between the two lexias . . . establishing a pattern like cinematic cross-cutting" (Landow 204). In the Eisensteinian conception of film editing, the cut from one shot that conveys a particular meaning to another shot with its own meaning creates a third meaning from the combination of the two in the viewer's mind. Human pattern recognition allows hypertext to perform associative links in a way not only similar to cinema but to the techniques of other literature, because in "linking, this necessary coherence can also take the form of perceived analogy - that is, the link, the jump across the textual gap, to some extent reifies the implied connection (implied link) found in allusions, similes, and metaphors" (Landow 204). So, links imply meaningful connections between lexias. If a reader can expect resonances or meaning between linked lexias, then it should follow that a reader can, in a hypertext that has any kind of story, expect there to be some sort of narratological link between two linked lexias, even if the link functions as a break in a narrative flow. The fact that the author has decided exactly which lexias are linked together means that the text is set up to be read in one of a certain number of orders. This is a narration of multiplicity, narration with options, but narration nonetheless.

So, if a link is a part of narration, then does it perform the narrative act of leading to anachrony? It is clear that many links from one lexia to another leave one point in time and arrive at another, sometimes earlier and sometimes later in story time. If these kinds of jumps were being made in sections of prose printed in sequence in a book, they would be anachronies, except for when story time is advancing at a somewhat regular pace, and not returning to a previous point, as we might see with linear chapter transitions in a printed novel. The aspect that distinguishes a prolepsis from this is that it is a significant jump forward in time, out of proportion with the previous flow of the story, and it may return to the point in story time that it left behind (indeed these prolepses can be quite brief). A nonlinear hypertext fiction does not have the regular, proportional narrative flow to provide contrast to prolepsis; consequently, if we consider links to create anachronies, then every jump forwards in time must be a prolpesis. But the question of whether links are anachronies at all is not settled. The answer depends on whether we view hypertext fictions as a whole, in the way that a novel for example is a whole, or as a set of individual parts that can be read separately to a satisfactory degree and just happen to be joined together in a network. In her artist's statement for *Uncle Roger*, Judy Malloy writes that

"each lexia was written as a scene that could either stand by itself or be combined with other lexias to create a narrative" (Malloy). If each lexia is a separate piece of art, then there is no implication of continuity on the reader's behalf. They can read any one lexia, and then leave. If there is no implication that the text is intended for the reader to continue then the link cannot be called anachrony because movement backwards or forwards in time is not relevant, because there is no movement, there are only individual pieces. However, Malloy provides an option: each lexia is simultaneously separate and connected, and the idea that a reader should continue and read many lexias is given equal importance. As a result, we can treat the conception of the text that is connected to other parts as adhering to rules of narration, and so a link that makes the narrative jump backwards or forwards in time is an act of anachrony. In any case, regardless of what an author says, hypertext fiction would seem to be far more closely aligned to the latter interpretation, because each lexia only has a small number of links leading to other lexias. The author wants the reader (and the narrative) to move in a certain, relatively small number of ways. This indicates that the reader should continue reading more strongly than it indicates that they should stop. As that continuous reading moves from lexia to lexia, it usually moves backwards and forwards in time; these are unmistakably anachronies.

It should be distinguished that while the link is an act of anachrony or a function of anachrony, as we've said anachrony does not describe the moment of the jump, it describes the entire span of text that is jumped to. So each whole lexia is either an analepsis, prolepsis, or both simultaneously (except for the very first one that a reader encounters). The lexia 'blue 9' from the second section of *Uncle Roger* is one of several lexias in this section which describe a birthday lunch for the character Tom Broadthrow. Every lexia in the work is told from the perspective of Jenny Clark, a live-in babysitter for the Broadthrow family. 'Blue 9' links to three other lexias. One of these, 'blue 10' occurs one week before the birthday party and features Jenny sitting outside a cafe writing in a notebook. This is an analepsis. 'blue 9' also links to 'blue 26', which features Tom opening a present later on during the birthday lunch. This is a prolepsis because it is a jump forwards in time rather than a continuous narrative flow; we learn by reading that there are other events in between these two lexias in story time. The third lexia to which 'blue 9' links is 'blue 29', which is similar to 'blue 26' in that it involves Tom opening another present (*Uncle Roger* often features events which are told in a similar way to previous events but with some small, significant details changed), and is also a prolepsis. To complicate matters, some lexias are instances of both analepsis and prolepsis, because each lexia can be linked to from

multiple other lexias. So, depending on the spot in story-time of the lexia the reader has just left behind, the new lexia could be either earlier or later in story-time. This occurs with 'blue 16' in *Uncle Roger*. This lexia is linked to from 'blue 15', and occurs shortly after it, making it a prolepsis. 'Blue 16' is also linked to from 'blue 72', which occurs later in story time, so the reader is travelling back in time to 'blue 16,' making it an analepsis. Allowing for this possibility does not seem to be a contradiction in hypertext fiction, as it fits the postmodern, networked structure of the text. The point remains that analepsis and prolepsis do apply, just in a different way to printed fiction, a more multiplicious way, a more postmodern way.

Analepsis occurs many times within the lexias of *Twelve Blue*. In one example, the lexia sl2_5,[2] the character Beth is at the present moment (the current centre of the network) on a car journey with her father Javier to retrieve a photograph of her great-grandmother from a man whom they do not know. The lexia is told from Beth's perspective, and spends much of its narrative time visiting memories of Beth's, from recent events like her parents divorcing, to memories from childhood of her father's distant behaviour during family vacations. This whole lexia is also a both an analepsis and a prolepsis, as it is linked to from, amongst other lexias, two narrated from the perspective of Ed Stanko, the man who Javier and Beth are on their way to meet. One of these lexias, sl2_4, features Ed going about his business before he meets Javier and Beth, and the the other, sl3_4, features Ed recounting his meeting with Javier and Beth in a disparaging manner. These events have happened before and after sl2_5 respectively, and link to sl2_5 via the coloured threads at the side of the screen, making sl2_5 simultaneously an analepsis and a prolepsis. So, links can create both analepsis and prolepsis, sometimes at the same time.

3.3.2 Personal narration: focaliser, stream of consciousness, and free indirect discourse

Anachrony works somewhat differently in hypertext compared to modernism, but still shares many similarities. Likewise, there are some similarities in the usage of subjective narration in hypertext and modernism, although they do occur less frequently in hypertext. The same techniques are still present: stream of consciousness and free indirect discourse. A notable characteristic of some modernist fiction is the fact that the focaliser changes. That is, the

[2]The lexia titles used for *Twelve Blue* in this thesis are derived from the URL of the relevant lexia; in this case, that is `http://collection.eliterature.org/1/works/joyce__twelve_blue/sl2_5.html`.

narrative perspective moves around from character to character, even if the ostensible narrator remains the same, for example remaining in the third person. Virginia Woolf's work is the greatest exemplar of this - with the narrative perspective roving from character to character in the dinner scene in *To the Lighthouse* for example - but it also occurs in Fitzgerald. *Tender is the Night* spends large portions of narrative time tied to the perspective of either Rosemary Hoyt (in the early part of the book), Dick Diver (for most of its second half), or Nicole Diver (in some of the later parts), but will occasionally move from one of those characters' perspectives to one of the others' to provide a reaction to something. When the focaliser changes in hypertext fiction, it is more likely to correspond with a structural change like a change of lexia rather than occurring within a section, even from one sentence to the next, as in these examples from modernism. Michael Joyce's *Twelve Blue* is told from the perspective of many characters, but each lexia will adhere to the perspective of just one of those characters at a time. The work as a whole comprises eight sections, and each of those sections contains twelve lexias, except for the first section, which has only one lexia. Usually, in each section there will be one or two lexias from the perspective of each character. How long a reader spends in the company of a particular character depends on the choices they make; if the reader selects links from the illustrated threads at the side of the page it is likely that they will be taken to a different lexia in the same section (although sometimes it is an adjacent section), and thus read the perspective of a different character, but if the reader instead chooses to click the hyperlinked words within a lexia, it is more likely that they will remain on a tangent that moves across several sections but remains with the perspective of a particular character, or at least a character who is closely related. This second practice comes closer to creating linear narratives (in the short-term, and they still won't quite be linear, but they do make clearer delineated stories emerge).

Uncle Roger's narration is not stream of consciousness or free indirect discourse, despite being written in the first person from the perspective of one character, Jenny, for the entire work. While it features memories, the style of narration is more declarative and matter-of-fact than the narration in *my body - a Wunderkammer*, which features more associative flowing of the narrator's thoughts, from one memory to another. But this is still not stream of consciousness because the narration does not flow spontaneously and ungrammatically; it remains very constructed. For similar reasons, subjective narration is not present in *Seed*, *The Jew's Daughter*, *Voyage Into the Unknown*; in these texts the focaliser is narrating, rather than the narrator being a third party. The narrator is a third party in *Twelve Blue* but it remains slightly too

distant for free indirect discourse; the biases of the characters do not directly affect the prose. Free indirect discourse does occur in *Victory Garden* on rare occasions when a character's directly thoughts influence the otherwise distant third-person narration. We see this in the lexia "Controversial" when we move from reported speech, to objective third-person narration, to what appears to be a reportage of the character Urquhart's thought at that moment, after he has spoken: "'...Unlike our colleagues, we seek an interface not with the conscious mind, but with the Unconscious.' Urquhart let the awful word linger in the porches of their ears. Yeah, you heard me" (Moulthrop). Here, the final sentence is free indirect discourse. It does not occur often in the hypertexts, and is rare even in Moulthrop's text, but it does add dramatic effect, as seen in this particular statement.

3.4 Hypertext fiction as a continuation of modernism

Hypertext fiction recalls aspects of modernism, and it is possible that modernism was an influence on it, but it is also possible that postmodern fiction and theory has at least as much of an influence on hypertext. Firstly to modernism. One of the commonalities between modernist fiction and hypertext fiction is the use of fragmented, nonlinear narratives, which attempt to convey a subjective experience of the passing of time. Dirk Van Hulle identifies this as a key factor in the comparison when he writes that "the experiments of the modernists prefigure literary aesthetics in the digital age. Notably the tendency to deviate from a linear narrative structure anticipates non-linear forms of writing and reading that characterize hyperfiction (digital literature that is marked by a hypertextual structure). Instead of representing or mirroring reality they tried to convey the experience of reality, resulting in complex studies of the ways in which human beings deal with time and space" (139-40). He also states that "the modernist attempts to convey the *experience* of time and space resulted in formal experiments that may be regarded as proto-hypertexts" (140). So, it is clear that we can read backwards and see hypertextual elements in modernist fiction (which were obviously unintentional because hypertext did not exist in the modernist era), and while it is less simple to read in the opposite direction and see modernist elements in hypertext fiction, the similarities are indeed there.

Rettberg identifies electronic literature's use of "referentiality and intertextuality" (54) as a strategy from modernist fiction. Postmodernism also features intertextuality a great deal, but for different reasons. One of the characterising distinctions between modernism and postmod-

ernism is modernism's faith in metanarratives, and the value it places on formal structures, versus postmodernism's rejection of these ideas, its lack of faith in systems. Modernism uses intertextuality to refer back to the classics, and place itself in a lineage of literary history, a new but still integrated part of the existing system. Meanwhile, postmodernism uses intertextuality in a more playful way, without the overarching motivations of modernism, with more of a focus on pastiche, acknowledging the mind-boggling array of culture that is available both inside and outside the literary canon. As such postmodern fiction is more likely to make references to 'low culture' or popular culture than modernism, which prefers to allude to sources like Homer, Shakespeare, Celtic mythology, and opera. Hypertext fiction is more similar to modernism than to postmodernism in its use of intertextuality. It has an earnestness to it, and a strategy much like modernism of referring to revered works from the past in order to legitimise itself as a valid literary movement. Jessica Pressman's idea of digital modernist works are, indeed, electronic pieces that adopt "a modernist practice of seeking inspiration and validation in a literary past" (2). Some of the works that Pressman specifies as being examples of digital modernism are not hypertext but instead non-interactive works which present themselves as having a certain difficulty or distance that creates a barrier of entry similar to that of modernist novels. She writes that these works "resist the alignment of electronic literature with hypertext, evade reader-controlled interactivity, and favor the foregrounding of text and typography, narrative complexity, and an aesthetic of difficulty." (81). Although this thesis focuses on hypertext fiction, it does not align electronic literature only with hypertext, and it recognises the wide range of audio-visual works both interactive and non-interactive that have developed since the peak of hypertext fiction's popularity; hypertext is particularly useful for comparing with modernist novels because it is still reliant on text (aside from its other points of comparison). This project also disputes the idea of reader-controlled interactivity to which digital modernism is opposed. Despite the claims of Landow that "hypertext blurs the boundaries between writer and reader" (4), readers of hypertext fiction do not actually have much control, because of how few choices they really have when moving from one lexia to the next, and because all of those choices are predetermined by the creator of the hypertext work. As Astrid Ensslin and Lyle Skains summarise, "in a hypertext environment, the reader's freedom to form personal associations and connotations within the formal constraints of the material text is considerably restrained given the existence of manifest, technically implemented hyperlinks, which are more likely to prevent than facilitate creativity in readers accustomed to monolinear plots and tan-

gible narrative boundaries" (298). There are only so many forking paths down which one can travel in hypertext fiction.

The point about seeking validation from past literature applies to hypertext as well as non-hypertext works. The epigraph of Michael Joyce's *Twelve Blue* references a postmodern text, *On Being Blue* by William Gass. Similarly, Stuart Moulthrop's *Victory Garden* quotes Jorge Luis Borges's "The Garden of Forking Paths," in a direct acknowledgement of how influential Borges's writing was on the structure, content and even the title of *Victory Garden*. These references are much closer to the modernist tradition of reverently reusing past literature, rather than postmodernism's tendency to play with references to external material, distort them, and use them for a different purpose than their original one.

Rettberg also mentions the priorities of modernist writers to make a "significant formal break with the traditions that preceded" them, and their endeavours to find "ways of using language to represent interiority and the flow of human consciousness" (55-6), both of which electronic literature does; the former perhaps without the philosophical drive to do so that modernism had, but unavoidably due to the nature of electronic literature as a new genre on a new platform, and the latter not in every hypertext fiction but certainly deliberately and notably in the cases where it is done. As with modernist fiction, time and place play important roles in these hypertexts. In modernism it was because of the changing conception of these things in a tumultuous period in history, which literature had to respond to in form and content, and in hypertext it is due to the networked, nonlinear structure of their stories, which is driven by the invention of the technology on which they are composed, mediated and consumed. They are unavoidably concerned with the movement of thoughts backwards and forwards through time, whether those of characters remembering the past, or the reader piecing together the original order of events in their own mind.

This leads to a key distinction: that hypertext's debt to modernism is about more than their narrative similarities, because while they are important, their spirit or reason for operating as they do - and what they are responding to - is also important. Pressman highlights an element shared between some electronic literature and modernism that is less tangible than narrative techniques but is still very important, which is a shared commitment to the avant-garde. The reason behind creating art can be important in forming literary movements; certainly there were vast differences in formal technique between modernist writers, but many of them shared

a spirit of creating new forms of expression while re-interpreting the literary canon of the past. Creators of literary hypertext exercised experimentation in pushing the form forward using new means, making stories that could not have existed before. The avant-garde aesthetic that Pressman attributes to non-interactive works can also apply to interactive hypertexts. The aesthetic of difficulty does not disappear simply because a reader has some form of (extremely limited, as stated) agency; hypertexts can still be quite impenetrable and difficult to comprehend, at least at first, but sometimes even after a considerable amount of reading, because of the way they willingly disorient the reader, moving them to different points in time and the perspectives of different characters in different physical places, presenting information and then decontextualising it by jumping to something else (or at least provide context in a way that is not immediately apparent based on the strategies with which we are familiar from books).

3.4.1 Can modernism continue?

It is clear that hypertext is indebted to modernism, and that it incorporates modernist narrative strategies. The question that remains is whether works of hypertext fiction can be considered to be literal continuations of modernism, rather than being part of their own genre or movement and merely influenced by modernism. The core of that question is whether literary modernism has continued at all, or whether it ended, irrevocably, either in 1939 or even earlier. This thesis has situated modernism as being defined by formal experimentation as a response to a specific time in history, and the changing philosophical and scientific ideas of that time. Therefore, it would at first seem impossible to classify something not from that time as being literally modernist. However, some arguments should be considered. David James has discussed modernism having a continuing legacy in contemporary fiction, before he and Urmila Seshagiri later explored the concept of metamodernism. Timotheus Vermeulen and Robin van den Akker are the other main progenitors of the idea of metamodernism, although their writing is focused on many different kinds of art, while James and Seshagiri devote their attention strictly to literature, which makes them more useful in this particular argument. This sub-section will explore the evolution of these ideas, and try to offer an interpretation as to whether modernism has continued to the present day, and if that is even possible. Reading James happens to provide a method for viewing this problem from multiple angles.

In his 2011 edited collection *The Legacies of Modernism*, James posits that modernism has

continued in the work of several contemporary writers of fiction. He highlights Toni Morrison and Ian McEwan, amongst others, as examples of this, due to their focus on representing subjectivity in narration. It is possible for the genre to continue because, James says, "the modernist project is unfinished" ("Legacies" 1). We may think of modernism as having ended in the middle of the last century, but according to James this is not accurate. It was, at best, only interrupted (by postmodernism). James writes that the contemporary authors he focuses on have picked up where modernism left off, and that "we can legitimately read the modernist period itself via models of continuity and adaptation (rather than demise) after mid century, so as to enrich the way we reconstruct the story of fiction's postwar development" ("Legacies" 2-3).

James questions the legitimacy of confining literary genres to particular periods in history. He quotes Dominic Head from later in the same book, noting that the "perennial problem with literary history is that it emphasises change, drawing chronological lines in the sand that may be preliminary signposts, merely, requiring complication and enrichment, so that the way the history is manufactured is constantly under review" (James, "Legacies" 3). The idea of renegotiating literary history and not simply adhering to categorisations made by previous generations of critics makes sense. In the case of modernism, James states that postmodernism has an indelible effect on how we view what came immediately before it. James quotes Patrick O'Donnell in another of the later chapters of the book, saying that the relationship between modernism and postmodernism "continues to evolve and change as the contours of the landscape change when new work appears, when 'older' work attracts new forms of attention" (James, "Legacies" 4). Ultimately this thesis is not concerned with defining the moments in time when genres begin and end. Genre is a malleable concept, but it is useful in this project for providing groupings of texts whose narrative strategies can be compared. This thesis is, however, concerned with the phenomena of modernism and hypertext fiction as responses to the particular cultural and technological conditions that surround them. There are similarities in how the narratives of those seemingly quite different genres respond to evolving ideas about temporality. This chapter engages with the potential for current fiction to continue the practices of modernism and therefore continue modernism itself, with the implication that hypertext continues some of those practices. In Chapter 6 we will see that regardless of the conceptual question of whether modernism can continue, some narrative practices from some modernist texts are used in a similar way and for similar reasons in some hypertext fictions. The key

reason is conveying the subjective experience of time. James argues in 2011 and in his own book *Modernist Futures* in 2012 that modernism continues in contemporary fiction because of the endeavour by some writers to convey the subjective experience of their characters. Chapter 6 of this thesis will identify similar things to James, but does not agree with his (since revised) judgement that this indicates a continuation of modernism. It instead underlines that these two genres, which have been compared thematically, are similar in their usage of analepsis, and that similarity is made more visible by close readings supported by data from distant reading. From James's perspective in 2011 and 2012, "fiction today partakes of an interaction between innovation and inheritance that is entirely consonant with what modernists themselves were doing more than a century ago" ("Futures" 2). Part of that inheritance is that the contemporary authors that James discusses "continue one of the hallmark aims of modernist fiction - to evoke interior subjectivity by simulating the effect of impressions, whether sustained or incoherent, to which subjects emotionally and intellectually respond - they also invite us to reconsider the supposedly inward orientation of that aim" ("Futures" 9). James expands on that latter description to suggest that the original modernist period in fiction was "simply a laboratory for examining consciousness as a hermetic domain" ("Futures" 9). There are two thing to address here. Firstly, the effort to represent subjectivity is not the only defining aspect of modernism - there is also formal experimentation, an avant-garde aesthetic or even an aesthetic of difficulty, a re-interpretation of the literary past, and even more importantly, a reaction in form, subject matter, or both to the technological, urban, scientific, cultural, and philosophical concerns of the turn of the twentieth century (at least in the west) - so the use of highly subjective narration does not alone signify a modernist novel. Hypertext fiction often uses subjective narration, and as discussed it is not literally a continuation of modernism, but rather its own genre which is influenced by both modernism and postmodernism. Secondly, the subjectivity in novels from the actual modernist era is not as inward-looking as James suggests: the characters in Woolf's *To the Lighthouse* for example show in their thoughts complex reactions to each other's actions, past and present. This does not fit the description of being hermetic, and neither does the influence of technology on the thought patterns of characters in some modernist novels, and the representation of those thoughts in prose. Subjectivity cannot be only inward-looking if it is influenced by the world around it, as we see in the short, staccato thoughts of Leopold Bloom, undoubtedly influenced by the fragmentary sentences and dropped pronouns of telegraphs.

One more aspect of James's earlier perspective is the idea that contemporary fiction is a con-

tinuation of modernism after a brief, unfortunate interruption by postmodernism. He writes that "contemporary fiction takes forward the trailblazing practices of early-twentieth-century writers in a new yet belated manner - belated by virtue of the way it reveals how postmodernism marked for a certain generation of novelists merely an interruption, a temporary delay in all that modernist aesthetics had still to achieve" ("Futures" 16). A different argument might be for evolution instead of interruption, with postmodern fiction a necessary result of modernism, and contemporary fiction doing something different again, but incorporating the influence of the previous two genres. James raised a useful point about postmodernism unavoidably changing our current view of what came before it. The world has changed since the modernist era and critical perspectives have changed with it, spotlighting the problems that had always been present in modernist fiction (with the avant-garde aesthetic that helped to define modernism there was also by definition elitism, while modernist fiction varyingly has problems with racism, fascism, classism, and more). The change of perspective that postmodernism has afforded means that we can never go back to creating strictly modernist fiction, and we probably should not want to.

This leads us to James's slightly belated recognition in a 2014 article with Seshagiri of the fact that the field of modernist studies has expanded over the past decade or so to include more cultural criticism than it had before. James and Seshagiri adopt the term *metamodernism*, which denotes fiction that is influenced by modernism and self-consciously refers to modernism but is not modernist itself, because it cannot be. As part of this, James and Seshagiri have changed perspective on whether the modernist project has literally continued to the present day. They specifically acknowledge that the expansions of the field that Douglas Mao and Rebecca Walkowitz heralded in 2008 with their article "The New Modernist Studies" in *PMLA* "have invigorated numerous scholarly domains, including modern periodical studies, modernist feminism, visual culture, disability studies, critical race theory, the study of everyday life, and the reassessment of 'middlebrow' literary production. But it is the transnational turn, as Mao and Walkowitz, among others, have termed it, that has expanded the field most dramatically" (James and Seshagiri 89). Their conception of metamodernism is a useful progression from, and contradiction of, James's earlier suggestion that modernism could be continuing in contemporary fiction. Instead, they state that modernism is in fact temporally bound to the late nineteenth and early twentieth centuries, and that what is happening in fiction now is in fact metamodernism: fiction that comments on its modernist predecessors and incorporates some of

their poetics, but is not the same and is not a direct continuation of modernism. James and Seshagiri's return to the logic of periodisation

> not only offers a rubric for reading contemporary literature's relationship to modernism but also generates a retrospective understanding of modernism as a moment as well as a movement. That moment, we contend, should still be understood in historically conditioned and culturally specific clusters of artistic achievements between the late nineteenth and mid-twentieth centuries. Although stubbornly in conflict with the critical rhetoric of transhistorical extension, our contention offers a clear premise for tracing how a significant body of late-twentieth- and twenty-first-century literature consciously responds to modernist impulses, methods, and commitments (88).

Hypertext fiction responds to modernist methods in its use of not only subjective narration, but fragmented storytelling, nonlinearity, and references to earlier literary works. James and Seshagiri state that metamodernism seeks to "to reassess and remobilize narratives of modernism. We use the phrase 'narratives of modernism' in a dual sense. It refers, on one hand, to experimental fiction shaped by an aesthetics of discontinuity, nonlinearity, interiority, and chronological play" (89); those characteristics can easily be used to describe hypertext fiction. James and Seshagiri now say that it is unfair to label contemporary works modernist because "we fail to do justice to contemporary literature if we approach it as either a belated iteration of modernism or the outgrowth of a movement that never receded. Periodisation, therefore, amplifies, rather than constrains, scholarly discourse about modernism, its several legacies, and the moment of contemporary literature" (90-1). They settle back on the standard time frame for literary modernism because "despite these and numerous other, varied efforts to repudiate modernism's early-twentieth-century genesis, the decades between 1890 and 1940 repeatedly emerge as the chrysalis for modern literature's form-breaking work" (James and Seshagiri 91).

Metamodernism is a useful perspective for viewing hypertext fiction, as is modernism and (as we shall soon see) postmodernism. The description of fragmentation and nonlinearity being important to metamodernism (which concepts also reflect the fragmentation induced by the expansion of the field of modernist studies, which is a good thing) remain in the mind as descriptors of hypertext fiction. In her essay *Modern Fiction* in 1919 Virginia Woolf described the work of her contemporaries (using Joyce as an example) as attempting to "reveal the

flickerings of that innermost flame which flashes its messages through the brain" and to create "sudden lightning flashes of significance" which come "close to the quick of the mind" (161). This attempt to represent subjectivity is a feature of some hypertext fiction, and while hypertext fiction exists in a different context and reacts to a different world than modernist fiction, it undeniably uses some methods from modernism in order to achieve a similar aim. Hypertext also has other aims and other influences, however, one of which is postmodernism, which we will now discuss.

3.5 Hypertext fiction as postmodern fiction

In form, the comparisons between postmodern fiction and hypertext fiction are quite obvious; there would seem to be more in common, on the surface, between postmodernism and hypertext than between modernism and hypertext. But the full story is not so simple, and there is more to consider than the surface. The closest comparison between postmodernism and hypertext fiction is a surface one though, and it is that the de-centred, networked form of hypertexts is similar to that of some prominent works of postmodern fiction, and also speaks to an influence from post-structuralist theory. This relates to other relevant points of comparison which are the supposed empowerment of the reader at the expense of the author, the presence of intertextuality (even if it's used in a different way than in postmodernism), and the rejection of a text having one set ending or reading order. Narrative fragmentation was a modernist strategy, but it is done differently in hypertext fiction, in a way that is more similar to postmodern fiction. The novels of Woolf and Joyce (and to a different extent Bowen and Fitzgerald) are nonlinear in their narratives, but they still require a reader to read them from front to back; in this sense they are linear. Conversely, postmodern novels such as *Hopscotch* by Julio Cortazar, *Infinite Jest* by David Foster Wallace, *House of Leaves* by Mark Z. Danielewski (and, if we were to classify it as postmodern rather than calling it a bridge text from late modernism, then *Pale Fire* by Vladimir Nabokov) all direct the reader to move around the book itself in a nonlinear fashion through the use of endnotes and other devices. Of course, this is not the case in all postmodern fiction - *Slaughterhouse 5* by Kurt Vonnegut is a good example of a postmodern novel that moves backwards and forwards through time (although, this is linear from Billy Pilgrim's perspective) while the reader still progresses in a straight line from the front to the back of the book - but the directions to the reader to move around the book remains a tactic

that postmodernism sometimes does use when it has a nonlinear narrative, whereas modernism never does. Similarly, in a hypertext the reader does not progress in a direct sequence from a first numbered lexia to a final one; they follow links to move all around the 'map' of that particular text, moving between lexias that might be nowhere near each other in a sequence. Although, it should be acknowledged that from the reader's perspective, on their first time reading a particular hypertext, the way they progress through it might as well be in sequence, as they do not yet know any other way through the text (even if they are probably aware that the text has a network structure and that there would be other paths); for them, at the present moment, this is the only path.

This relates to an idea from Deleuze that Landow discusses, that in a de-centred system, the position in a network that one is currently reading becomes the de-facto centre. As Landow phrases it, "as readers move through a web or network of texts, they continually shift the center - and hence the focus or organizing principle - of their investigation and experience. Hypertext, in other words, provides an infinitely recenterable system whose provisional point of focus depends on the reader" (56). Deleuze's rhizome - the network of textual parts that can be read either separately or together in any order - seems to apply perfectly to hypertext generally. Laura Miller writes that the reason critics (often also the practitioners) of hypertext were so triumphalist about it in academic writing in the 1990s was because "hypertext is a form of writing perfectly suited to contemporary literary theory," because, as she notes that Landow identifies, "hypertext is 'an almost embarrassingly literal embodiment' of key post-structuralist notions" (Miller). The similarity between hypertext fiction and the theoretical rhizome does indeed seem too literal. Ensslin and Skains allude to the suspicious convenience of this when they say that metaphorically,

> the concept of nonlinearity lends itself to the principles of the rhizome . . . ramifying, decentralized, horizontally organised root structures, which do not have a clear beginning or end. Rhizomes conveniently deviate from the arborescent, hierarchical structures associated with logocentrism. In the same vein, early literary hypertext followed an avant-garde principle, seeking to undermine hierarchical textual order and linear narrative development by offering readers highly fragmented, subjective reading experiences, aimed to produce unique and individualized receptive and hermeneutic experiences (297).

Ensslin and Skains go on to prove that this idealised version of hypertext fiction simply does not work in reality, partially because of the reason already mentioned that the freedom supposedly afforded to the hypertext reader is a fallacy. There is also the fact that, as Landow himself recognises, the rhizome is "impossible to fulfil in any information technology that uses words, images, or limits of any sort" (61). A hypertext can never be a perfect rhizome, because it will always have some hierarchy, and there does tend to be a set beginning point in hypertext fiction, if not an end point.

So, while in form hypertext bears more similarity to postmodernism in this one respect (and does not perfectly embody post-structuralist thought), in other aspects such as the use of personal narration to convey the subjective experience of time and place, and in its more earnest experimentation with form while recalling the literary past, hypertext fiction does appear to be closer to modernism. It is not a direct continuation of modernism, because modernism as stated in the previous chapter is a response to a particular set of historical circumstances, but hypertext fiction responds to its own era and its technological affordances using strategies more similar to modernism than to postmodernism.

3.6 Conclusion

To summarise, hypertext fiction is not literally modernist, nor is it postmodernist, but it takes key influences from both of those literary movements and stands as a genre on its own. It would be impossible for modernism to continue into the twenty-first century, because it was a reaction to a particular time and context. Postmodern techniques continue to be used in fiction, although the genre's height appears to have occurred from the 1970s to the 1990s, and it has been succeeded to an extent by genres like autofiction. Without either modernism or postmodernism, hypertext fiction would not be what it is. It takes from modernism its narrative fragmentation (but with overall unity), its references to the literary past, and its use of subjective perspectives of characters; while from postmodernism it takes its networked structure, the idea that each newly-read lexia is the new centre-point of the whole text, giving the impression of having no one beginning or ending (when, usually, they do have these), and its provision of multiple paths and meanings to the reader. The rhizome can never be perfectly captured in fiction, and neither can the quick of the mind, but hypertext makes meaningful gestures towards both, and so bears the influence of both modernism and postmodernism in a new medium.

Chapter 4

Time After Time: Narrative Levels

4.1 Introduction: Defining narrative levels

Narrative levels are an important part of the landscape of this thesis. They are another narrative disruption, like anachronies, that affect the impression a story coveys. They often co-occur with anachronies, and are essential to encode along with them. Quantifying the proportion of texts' words spent within different narrative levels shows the relative importance of this technique compared to anachronies. Narrative levels are not present in as many of the texts, but their effects are significant when they are used, as they contribute increased fragmentation and allow multiple voices to tell stories. Those voices narrate memories, the temporal disruptions that form the main argument of the thesis, that the modernist and hypertext fictions in the corpus use similar methods to a similar extent on a sentence-to-sentence level to evoke the experience of memory. Narrative levels are the structural apparatus that allow stories within stories to occur. They happen when there are multiple separate narratives within one text. The different narratives can be related to each other to varying degrees. The way that we describe narrative levels in each individual case depends on their function in the overall text and on the roles of the narrator and narratee. Narrative levels can be parallel (or horizontal), featuring many stories that are distinct from one another but are technically on the same diegetic level because they bear the same relation to the overall frame story (or lack thereof). Levels can also be vertically nested inside one another in a Russian doll structure where each story is contained by another

story (except the overall frame) and the levels go deeper and deeper. We will discuss all of these features shortly.

4.2 Narrator

A piece of fiction always has a narrator. In Genette's conception that automatically creates at least two narrative levels, because the text is an intermediary between the narrator and the reader. This thesis contends that that particular distinction is unnecessary because the text is always, unavoidably, an intermediary; for our purposes, narrative levels must be created in addition to the ever-present boundary between narrator and reader. Genette describes narrative levels as follows: "any event a narrative recounts is at a diegetic level immediately higher than the level at which the narrating act producing this narrative is placed" (228). Diegesis means something that is happening inside the fictional world. As such an initial narrator is extradiegetic; they exist somewhat outside events in the story. Unless, of course, they are a first-person narrator. Mieke Bal provides some perspective on what exactly a first-person narrator is and how it functions. The functions of the various factors in play contribute significantly towards allowing us to define whether and how a text uses narrative levels. Accordingly, Genette says that his classificatory terms for narrators designate "not individuals, but relative situations and functions" (229). Bal goes further and writes that in a sense there is always a first-person narrator, even in texts written in the third person. In this conception a statement made in the third person has an implied addition of "I narrate" preceding it; there is always a narrator even if they are not explicitly mentioned. Bal writes:

> The speaking agent does not mention itself in the process. It might just as well have done so. . . . As soon as there is language, there is a speaker who utters it; as soon as those linguistic utterances constitute a narrative text, there is a narrator, a narrating subject. From a grammatical point of view, this narrating subject is always a "first person." In fact, the term "third-person narrator" is absurd: a narrator is not a "he" or "she." At best the narrator can narrate about someone else, a "he" or "she" who might, incidentally, happen to be a narrator as well. This does not imply that the distinction between "first-person" and "third-person" narratives is itself invalid. Just compare the following sentences:

b I will be twenty-one tomorrow.

c Elizabeth will be twenty-one tomorrow.

If what I said above is valid, we may rewrite both sentences as:

(I say:) I will be twenty-one tomorrow.

(I say:) Elizabeth will be twenty-one tomorrow.

Both sentences are uttered by a speaking subject, an "I." The difference lays in the object of the utterance. In b the "I" speaks about itself. In c the "I" speaks about someone else. When in a text the narrator never refers explicitly to itself as a character, we speak of an *external* narrator. This term indicates that the narrating agent does not figure in the fabula as an actor. On the other hand, if the "I" is to be identified with a character, hence, also an actor in the fabula, we speak of a *character-bound* narrator (12-13).

Recognising and categorising external and character-bound narrators is important because changes in narrator are a common indicator of a change in narrative level.[1] For example, a switch from external narration describing a group of characters sitting around a fire to character-bound narration, in which one of those characters tells a story to the other people present about something that happened to them in the past, would be a sign that the narrative level has changed. In this example, we have moved from extradiegetic (or external) narration to intradiegetic (or character-bound) narration in Genette's terms. The relation of extradiegetic to external and intradiegetic to character-bound is not one-to-one - it can change based on the style of narration used - but it does happen to be the case here. If we had gone another level down - if there had been another story within the character's story, perhaps a flashback or deviation that they take in order to more fully explain their story, but that is in itself a whole narrative - this would be metadiegetic narration (diegesis within the diegesis) while still being character-bound. Navigating the distinction between these different kinds of narrators helps us identify the sometimes subtle clues that the narrator of a text has changed, and therefore that the diegetic level may

[1]Similarly to the distinction between first- and third-person narration being not as concrete as we might once have thought, Bal states that second-person narration is merely first-person in disguise: in second-person narration, "the 'you' is simply an 'I' in disguise, a 'first-person' narrator talking to himself; the novel is a 'first-person' narrative with a formal twist to it that does not engage the entire narrative situation, as one would expect it should" (22).

have changed.

For Genette, *diegesis* is synonymous with story, or things that happen on the level of story, as opposed to *discourse*. He acknowledges that the term is borrowed from studies of film, in which something that is part of the diegesis is part of the internal fictional storyworld of the film, whereas non-diegetic aspects of a film exist outside (or are layered on top of) the storyworld of the film. Genette states that "with the same meaning ['story'], I will also use the term *diegesis*; which comes to us from the theoreticians of cinematographic narrative" (27). To turn briefly to an explanation from film studies, Bordwell and Thompson state simply that the "total world of the story action is sometimes called the film's diegesis (the Greek word for 'recounted story'). In the opening of *North by Northwest*, the traffic, streets, skyscrapers, and people we see, as well as the traffic, streets, skyscrapers, and people we assume to be offscreen, are all diegetic because they are assumed to exist in the world that the film depicts" (76). The concept is often used in discussions of sound in film, as "diegetic sound is sound that has a source in the story world. The words spoken by the characters, sounds made by objects in the story, and music represented as coming from instruments in the story space are all diegetic sound. . . . Alternatively, there is nondiegetic sound, which is represented as coming from a source outside the story world. Music added to enhance the film's action is the most common type of nondiegetic sound" (Bordwell and Thompson 279-9). To translate this to literary fiction, something happening within the world of the story is diegetic, while something happening outside the world of the story is non-diegetic. This is how we have extradiegetic narrators; they are entities telling the story who are not themselves part of the world of the story. The terms narrative levels and diegetic levels are synonymous, because a diegesis within a diegesis, a storyworld contained within the world of another story, is the same thing as a narrative within a narrative.

In relation to narrative levels in literature, the term *diegesis* is useful for delineating what is happening on the top level of the story, what is part of the main fictional world, versus a storyworld contained within that. In Genette's conception, diegesis "designates the universe of the first narrative" (228). He acknowledges the confusing nature of the order he suggests for his terms extradiegetic, intradiegetic, and metadiegetic, which for him describe progressively deeper narrative levels despite the fact that 'meta' usually means something higher, not lower, than a main object. He writes that in his theory the term *meta*

> functions in a way opposite to that of its model in logic and linguistics: metalanguage

> is a language in which one speaks of another language, so metanarrative should be the first narrative, within which one would tell a second narrative. But it seemed to me that it was better to keep the simplest and most common designation for the first degree, and thus to reverse the direction of interlocking. Naturally, the eventual third degree will be a meta-metanarrative, with its meta-metadiegesis, etc. (Genette 228).

Genette also applies the terms extra-, intra-, and metadiegetic to define the narrators of descending narrative levels. So we return to the fact that determining the narrator's position is an important part of determining whether multiple narrative levels are being used. By default, whether a text is written in the first person or third person, with an external or character-bound narrator, the narrator is still extradiegetic, because the third-person or character-bound narration implies an external perspective. When another narrator is introduced, this new narrator is intradiegetic; they are a part of the initial story world rather than being outside it. As a result, the intradiegetic narrator's story is at a deeper narrative level than the one at which we entered the text because their telling of their story is happening within the first story. Again, understanding how the role of the narrator can vary helps to distinguish when a change of narrative level has occurred. In turn, identifying those changes in narrative level leads to a clearer understanding of the structure of a work of fiction, how its different pieces fit together and how the moments of transition or disruption between those pieces allow it to evoke, amongst other things, a particular disjointed experience of time.

4.3 Narratee

In addition to the position and role of the narrator, the position and role of the narratee is also important for determining whether narrative level changes are occurring in a piece of fiction. The narratee is the implied entity to whom the narrator is relaying the events of the story. The entity who is being engaged here is not exactly the same as the reader. The narratee is instead "the fictive entity to which the narrator directs his narration" (Schmid 1). Basically, it is the audience imagined and implied by the narrator, whether that is a reader or a character to whom they are speaking, or someone else. But it is not literally the individual reader, the person sitting and reading the text, because the narrator has never met this person - they are fictional (even in autobiography, arguably). If the narratee is the reader it is only ever an imagined general

reader. Gerald Prince is cited by Bal and by Wolf Schmid as initially developing the theory of the narratee. For Prince, like what Bal says about the first-person narrator, the narratee is generally implied even when not mentioned explicitly. In 1982 Prince writes that "if there is at least one narrator in any narrative, there also is at least one narratee and this narratee may or may not be explicitly designated by a 'you.' In many narratives where he is not, the 'you' may have been deleted without leaving any traces but the narrative itself" (16). Prince elaborates by stating that it can be ascertained that there is an implied narratee not based on direct evidence but instead based on the fact that there is a narrator, so there must be an entity to whom this narrator is telling their story. Prince writes that "just as any 'you' designating a narratee implies a narrator, any 'I' designating a narrator implies a narratee" (17). If a story exists, then it always has a narrator and a narratee.

According to Prince, references by the narrator to the narratee can serve functions such as challenging the expectations of the reader, or addressing assumptions that they might have (18-19). The latter function appears to be able to serve as a sort of pre-emptive excuse for improbabilities in the narrative, explaining them before the reader can object. References to the narratee could simply be a way to either get the reader to invest more, intellectually or emotionally, in the story (by engaging with their imagined opinion) or indeed to do the opposite, alienate the reader by asserting that their assumptions are wrong, removing ambiguities in the story and giving them instead one specific perspective on events. How much a narrator explains to their narratee can reveal things about the narrator and their assumptions. For instance, "a narrator may be quite mistaken in his evaluation of the knowledge, the personality, or the ability of a narratee character. He may, for instance, describe him as not very bright and think that he can easily lie to him and mislead him, whereas another, more trustworthy narrator portrays him as particularly intelligent and well-informed" (Prince 21). The attitude of the narrator towards the narratee can also reveal the motivations or situation of a character-bound narrator. Prince states that there are varying degrees to which a narrator needs a specific narratee; he explains that in *Heart of Darkness*,

> it is presumably not necessary for Marlow to have his mates on the 'Nellie' as narratees. He could tell his story to a totally different group; he could even, perhaps, not tell it at all. On the contrary, in *L'Immoraliste*, Michel specifically needs to address his friends. Their presence in Algeria as listeners to his tale constitutes a necessary help for him, a necessary hope: they will probably not condemn him;

> they will understand him, maybe; they will certainly try to help him transcend his situation (Prince 21).

The effect of a changing narratee in *Heart of Darkness* shows the importance of noticing the relation between narratee and narrative levels. When the diegetic level of narration changes in this novel, it is indicated not only by a change in narrator but also a change in narratee. The different narrators are telling their stories to different recipients and for different reasons. The frame narrative is told by an unnamed crew member of the ship to an unnamed and indistinct, yet implied narratee. The second-degree narrative is told by Marlow to the gathered crew, of which the first narrator is a member. As Prince notes, Marlow could be telling his story to any other group of people without this mattering much to him. So, the grouped recipients are not important to Marlow, and the frame narrator is not particularly significant as a member of this group; he is hearing the same words as any other member of the group, he just happens to be the one relaying them to the narratee of the frame narrative. It could just as easily have been any other sailor, but it is this one. Marlow tells his story ostensibly as a way to entertain the crew while they wait for the tide to turn because "there was nothing else to do till the end of the flood" (Conrad). The real reason may be a need for Marlow to work through his experiences for himself (again, the specific make-up of his audience does not matter). We do not know why the frame narrator relays the whole story to us, or adds his brief scene-setting and closing remarks; regardless, someone is being addressed. On the subject of why a change in narratee might be used, Prince argues that when there are multiple narratees in a text, "whether it be from a moral, intellectual, emotional, physical, or social standpoint, narratees in a given narrative may be more or less different from one another" (24-5) and "these similarities and differences determine to a large extent our interpretation of and response to the narrative. Thus, many ironic effects depend on the distance between two (groups of) different narratees (*Les Infortunes de la vertu, Werther*); on the distance between narrator and narratee on the one hand and character on the other (*Un Amour de Swann*); or, on the distance between narrator and narratee (*Tom Jones*)" (25). So, there are many effects that can be achieved by changing the narratee, and this often corresponds with changes of the narrative level; this is the case in our *Heart of Darkness* example. This affects the way the story is told and what we should expect to be told. We may be told different things if it is implied that the narratee is a vague distant listener or reader (the narratee of the frame narrator's story) or if they are an experienced sailor (the audience for Marlow's story). So, when a narrative level changes any

time, we should be aware not only that the narrator is changing but that the narratee could be changing and that this will effect the nature of the information that we are given, its biases, its blind spots, and the motivations of its provider. And, from the opposite perspective, when the narratee or narrator changes, we should be aware that it is likely that a change in narrative level is also occurring.

4.4 Focalisation and situation

In addition to narrator and narratee, the focaliser of a narrative is also worth considering, for while it may not affect narrative levels directly, it does inform our view of the narrator, which in turn tells us about changes in narrative level. Thinking about focalisation also allows us to further think about situation (of observer, teller, listener) in relation to narratives, and situation and relations between positions are keys to understanding how narrative levels function in a text. A level only exists because it is positioned relative to another level. A change in level occurs when there is a change in how the story is being perceived (such as the identity of the entity doing the perceiving), or when a different story is being perceived.

The focaliser is distinct from the narrator. Genette defines the focaliser as "the character whose point of view orients the narrative perspective" or the entity "who sees" while the narrator is the entity "who speaks" (186). Under this definition, the focaliser perceives what is happening in the story, and they only have knowledge of what has happened up to the present moment in the story. By contrast, the narrator may have more knowledge. For example, if a character-bound narrator is telling the story of their life, the focaliser of the events in the narrative will be their younger self, with all the limitations of perception that the younger version of themselves had, which is then narrated by the character in their present state, which can set up ironies or allow them to comment on the lack of wisdom of their younger self. Focalisation can be seen as raw perception, which has biases and limitations, whereas narration is the filter through which that experience passes to get to the narratee and the reader, which applies its own biases. The focaliser is still part of the fabula of a narrative, while the narrator is part of the syuzhet, imposing an order and affecting how the raw material of perception is presented as a narrative.

In Genette's conception there are three types of narrative focalisation: zero focalisation, inter-

nal focalisation and external focalisation. Zero focalisation is the kind found in "the classical narrative," which has an omniscient narrator who "knows more than the character, or more exactly *says* more than any character knows" (Genette 189). With internal focalisation, "the narrator only says what a given character knows" (Genette 189). There does not have to be just one given character for this to work, the narrative can take the perspective of two or more different characters in succession. Accordingly, Genette provides three subcategories of internal focalisation to account for such instances: "(a) fixed . . . (b) variable . . . or (c) multiple" (189-90). Fixed focalisation takes the point of view of just one character. Variable focalisation uses more than one character, in sequence, relaying different parts of the story. With multiple focalisation the same event will be told from the point of view of several focalisers. These three different kinds of internal focalisation all allow the reader access to the thoughts and biases of one or more characters in the story; we know what they know. This contrasts with the aforementioned zero focalisation, where we are more privileged than any character, and we see all there is to see that is relevant (or that the narrator decides to show us). The third kind of focalisation in Genette's theory is external focalisation, in which we know less than what the characters know. We are not allowed to know their thoughts at all, and instead can only guess. This style of narration is appropriate for the iceberg theory of fiction, in which the bare minimum of story information is given to the reader, but we can tell that there is far more going on beneath the surface, and must infer this from the minimal details that we have (and which may leave room for ambiguity). Genette cites Hemingway's "Hills Like White Elephants" as using the device of external focalisation; the characters speak in clipped sentences, and while little is clear about their purposes initially, as the story goes on the reader is able to figure out that the two characters are going to seek an abortion, although the word is never spoken. The different kinds of focalisation can, amongst other functions, give or withhold information about the characters to create tension, allow readers to identify with the characters, ironically undercut the characters, and show important characteristics about the narrator (and how likely they are to tell us the truth, and what their biases are).

Bal agrees with much of Genette's perspective, but reduces the categories for describing focalisation from three to two. She writes that when "focalization lies with one character that participates in the fabula as an actor, we can refer to *internal focalization.* We can then indicate by means of the term *external focalization* that an anonymous agent, situated outside the fabula, is functioning as focalizer" (Bal 136). In this version of the theory, Genette's categories of

zero focalisation and external focalisation have been collapsed into one category encompassing any focalisation that never privileges the perspective of a character. Bal also provides some useful clarification of why internal focalisation is used, how it serves a piece of fiction, when she says that if "the focalizer coincides with the character, that character will have an advantage over the other characters. The reader watches with the character's eyes and will, in principle, be inclined to accept the vision presented by that character. Such a character-bound focalizer - which we could label, for convenience's sake, CF - brings about bias and limitation" (135). The constructive use of bias is evident in *What Maisie Knew* by Henry James, which is told from the point of view of the titular child. However, Maisie is not the narrator; she is not literally speaking to the narratee in the complex sentences of James's prose. Rather she is the focaliser, used to provide a particular perspective on events that an adult focaliser could not. In this novel "the narrator is not a child any more than the reader is. In his time, James was perhaps the most radical of experimenters, whose project was to demonstrate that, in the terminology of this book, narrator and focalizer are not to be conflated" (Bal 136). Burkhard Niederhoff disagrees with Bal's reliance on characters' point-of-view as a defining characteristic of focalisation, but the limitation that Bal discusses as being the desired result of focalisation does align quite well with Niederhoff's emphasis on limitation when he writes that focalisation "may be defined as a selection or restriction of narrative information in relation to the experience and knowledge of the narrator, the characters or other, more hypothetical entities in the storyworld" (Niederhoff 1). The importance of limitation and restriction in creating effects in narration is also evident in Genette when he states that the "narrator almost always 'knows' more than the hero, even if he himself is the hero, and therefore for the narrator focalization through the hero is a restriction of field just as artificial in the first person as in the third" (Genette 194). This brings us back to the importance of identifying the focaliser and how it reflects back on the narrator. If narrator and narratee are important for figuring out how narrative levels are functioning in a text, then focalisation is in turn important for determining how the narrator is functioning, what it is doing and why.

The focaliser and its position reveal biases of the narrator, how much are they adding or taking away from pure perception of the focaliser. The more we know about the reasoning, motivation, and modus operandi of the narrator, the better we can determine whether, how, and why narrative levels change in a text. Understanding the position of the focaliser also allows us to better understand where the narrator is in relation to that position, so then if the narrator's

position moves, we can see that the narrative level has changed.

4.5 Different kinds of narrative levels: vertical and horizontal

John Pier writes that there are two ways in which narrative levels can be sequenced: vertically and horizontally. This is a separate consideration from the division of narrative levels into extra-, intra- and metadiegetic. Those categories describe the relative depth of a narrative level in the overall text. Vertically structured narrative levels means that each new narrative in a text happens at a deeper or higher level to the narrative that preceded it, creating a nested sequence of narratives. Horizontally structured narrative levels occur when each new narrative occurs at the same level as the narrative that just ended, creating a series of narratives that are all embedded within one overall frame narrative - but share the same relation of depth to that frame narrative - or else have no frame narrative at all. Pier states that the role of narrator is key in the distinction between vertical and horizontal narrative levels. He writes that "narrative levels are distributed vertically when a change of both (diegetic) level and speaker and/or addressee occurs, and horizontally when no change of speaker takes place (as in a digression) or when several parallel stories are recounted by different speakers but at the same narrative level" (Pier 1). Suzanne Keen makes the same distinction between vertical and horizontal levels when she states that "fictions can present complications in level that result in a deeper set of levels, or variation can occur in a more horizontal fashion" (108-9). She cites Italo Calvino's *If on a Winter's Night a Traveller* as an example of a vertical narrative level structure, "where stories occur within stories (within stories), like the narrative equivalent of a matryoshka doll . . . sometimes called the Chinese box narrative." (Keen 108). She uses Chaucer's *Canterbury Tales* and Bocaccio's *Decameron* as examples of texts that use horizontal narrative levels, as they are "large-scale frame tales . . . both of which organize copious stories narrated by different tellers into coherent overarching storytelling situations" (Keen 108). These two types of structure serve different purposes in a fictional text. A vertical structure of narrative levels can facilitate an embedded sequence of many different speakers, each of which receives a story from the next one down the structure. It can also be used to incorporate different diegetic forms of media - i.e. fictional letters or diaries which are being read by one character, which in themselves may contain testimony from a character other than the one who has 'written' them. Meanwhile

horizontally structured narrative levels might be appropriate for depicting a series of different speakers who all tell a story to the same one listener, one after another. In the corpus for this project, most of the texts that use narrative levels structure them in a vertical manner. They rarely go deeper than one level (or a second-degree narrative) below the frame narrative, but in general when narrative levels are implemented in fiction it seems to be the case that they rarely go beyond this second level. It takes a rarer and more experimental text to keep adding narrative levels; to go further than three levels is rare indeed.

We have just addressed some reasons for narrative levels to be used to structure and tell a story in a particular way. There are other reasons to implement narrative levels in a work of fiction, and these help to create more intricate effects. The use of multiple levels can contribute to establishing irony, providing different perspectives on an event, or setting up the biases of a narrator. For example, if *Heart of Darkness* only had one narrative level, with Marlow as the only narrator, telling the story to us directly, we might well come to the conclusion on our own that he is an unreliable narrator with biases, but that fact is made more clear to us in the novel as it actually exists, with the frame narrator introducing Marlow as being aloof from the rest of the crew, and telling his story to the crew but not really caring if he had had a different audience. This shows us right from the beginning of the novel that Marlow is unusual, self-isolating, and has a grandiose opinion of himself. In this way narrative levels help us to understand the character and the story being told to us; we do not trust him, which is perfect for the dark and morally compromised material of *Heart of Darkness*. Bal chooses another canonical novel and illustrates the rationale for its use of narrative levels; in the case of *Wuthering Heights* the structure of the narrative levels, and the differences between how its narratives are told, highlights the positions of the different characters within their class structure, and possibly critiques that structure, while definitely solving some narrative problems and adding poetic richness to the story. Bal writes:

> The primary narrator of Emily Bronte's *Wuthering Heights* (1847) is an internal one, the snowed-in guest Lockwood. After a strange experience during the night, he asks the servant Nelly Dean about the family, and thus she becomes the narrator, already on a second level. As a servant, she is a typical narrator-witness, and it is as a witness that Lockwood asks her to tell the tale. The mostly invisible servant, in the class hierarchy of the day, sees everything, precisely because no one takes her seriously enough to hide things from her. Her tale is so long and elaborate, and so

> containing of things she cannot have seen, that we soon forget she is telling the story. Thus, we act as the other members of the household: Nelly is just as invisible to us as she is to the others. This produces a liminal affiliation between the structure of narratorial embedding and the social structure of a class society (52).

Nelly Dean's position in the household as someone to whom other characters pay little attention allows her to see more private details of the story than other characters could have. She then relays that information to Lockwood, through whom the reader attains it. Nelly's section has achieved something close to omniscience while nominally maintaining a first-person perspective and thereby maintaining narrative verisimilitude. We move from Lockwood's narrative level to Nelly's, without the breaking of immersion that would happen if we literally had a narrative told by an omniscient narrator nested inside the narrative of a character, who by definition cannot be omniscient. An omniscient narrator can be the narrator of a frame narrative but not an embedded one. Having an all-seeing servant as an embedded narrator solves this problem without having to jettison the added context and weight of time and family history that is added by Lockwood's narrative, which deepens the already heavy gothic gravitas of the story. The conceit also makes the reader unwittingly complicit in the class hierarchy, in Bal's view.

Bal gives further explication of some of the functions that narrative levels can serve when she writes that when there are two or more narrative levels (using the word text here to mean a distinct narrative within an overall text of multiple narratives), a "possible relationship between the two texts presents itself when the two fabulas are related to each other. This structure has two possible meanings: either the embedded story explains the primary story, or it resembles the primary story. In the first case the relationship is made explicit by the actor narrating the embedded story; in the second the explanation is left to the reader, or merely hinted at, in the fabula" (53). The idea of one narrative helping to explain another can be applied to both of our most recent examples. The frame narrative in *Heart of Darkness* helps to explain the perspective of Marlow's story, the attitudes that such an enigmatic narrator may bring to his tale. In *Wuthering Heights*, Lockwood's narrative sheds light on how Nelly has so much access to the main characters and the story, while maintaining the added depth that Lockwood's narrative provides. Prince makes a similar argument to Bal when he writes that "a variety of links may exist between the various levels of narration in a given narrative. The links may be architectural, in case the levels develop according to related rules of construction; they may be thematic; they may be causal, when, for example, one level explains what led to the situation

presented on another level; and so on" (35).

As we can see, vertical and horizontal narrative levels can be used for different reasons and effects. This corpus contains both of these types of narrative levels. Among the texts chosen, we see vertical narrative level structures in *Tender is the Night*, *Twelve Blue*, *Voyage Into the Unknown*, and *my body - a Wunderkammer*, while we see horizontally arranged narrative levels in *To the Lighthouse*, *Seed*, *The Sound and the Fury*, and *Three Lives*. More detail on all of these instances will be provided in their respective sections later in this chapter. We will see that they are used for effects like creating irony, providing different perspectives on the same event, or revealing character traits of the narrator. The latter point is particularly effective when there is more than one narrator, as the contrast between them can reveal further aspects of their characters. Those aspects of character can then in turn reveal further things about the rules of the fictional worlds which they inhabit. Horizontal narrative levels can also accommodate the perspectives of the same character at different times, making them in essence a different narrator - this happens in *The Sound and the Fury* for example - so it is evident that the interaction between narrative levels and disruptions in narrative time is important. Some of these effects can be achieved in other ways, but the use of narrative levels, either vertically or horizontally, provides another way of doing so, and the interaction between narrative level changes and narrative time disruptions creates a specific combination of effects that cannot be achieved any other way. The distinction between vertical and horizontal narrative levels is important for understanding exactly how that combination works; how these stories play with narrative levels and time in order to convey their characters' subjective experience of time.

4.6 A complication: narrative levels in dialogue

Some further detail is needed here on what constitutes an embedded story, before we move on to examples from the corpus of this project. Dialogue is an important subject to address. A story can be told in dialogue, but the fact that it is a narrative does not automatically mean that it is on a different narrative level to the story immediately surrounding it. This is because dialogue is part of the diegesis of a story; the words being spoken are not on a different diegetic level to the descriptions and other narration. The dialogue is being relayed to us through the same focaliser and narrator as the rest of the narration. When we read dialogue, it is being reported to us via the same means as everything else that is happening. Therefore it is usually on the

same narrative level as the rest of the narration. There are some exceptions and arguments against this. A different diegetic level can be created in practice if the dialogue lasts for so long that one forgets that it is dialogue; it essentially transcends its role as dialogue and takes on all the trappings of a separate narrative level. In this way, the story told in dialogue does have a separate narrator, the character telling the story. It is true that any character telling a story within dialogue is the narrator of their story, in literal terms if not in terms of narratological function, but they do take on the role of the narrator of a separate narrative level when their story becomes long enough. When this happens the narrating character's role as narrator is fundamentally changed because the *narratee* changes. The reader gives up awareness that the story in dialogue is being told to another character and feels like it is being told directly to them. The narratee has changed from a character within the diegesis of the story to the reader, who is outside the diegesis of the story. This transcendence is what happens in *Heart of Darkness* for example.

An example from the corpus of this project shows an embedded narrative level which is technically part of dialogue. In *Tender is the Night*, Franz Gregorovius, a colleague of one of the protagonists, Dick Diver, tells a story to Dick, recounting some events in which another colleague, Dohmler, had participated but which Dick had missed. Dick, Franz, and Dohmler are all psychoanalysts. The story recounts Dohmler's meetings with Nicole Warren's father, Devereux Warren, to arrange for Nicole's treatment at Dohmler's clinic. Franz is telling a story which Dohmler must have told to him earlier, because it includes scenes in which only Dohmler and Devereux Warren were present, and therefore contains details that only those two characters would know, and also includes Dohmler's judgements about Devereux Warren's character. This is one narrative complication with distinguishes this embedded narrative from the one in *Heart of Darkness*, but there are other formal complications. In Conrad's novel, the embedded narrative is all in quotation marks, it never ceases to be presented as dialogue, despite its length. Dohmler's narrative, which we are assured Franz is relaying verbally to Dick, is not presented as dialogue. It is instead told using third-person narration in the same style as the rest of the novel. It is given its own chapter. The preceding chapter ends with the words "he told Dick the story" (Fitzgerald 134); this is followed by a chapter break and the beginning of the embedded narrative, which commences with "About a year and a half before, Doctor Dohmler had some vague correspondence with an American gentleman living in Lausanne" (Fitzgerald 134). As such this is both an embedded narrative and an analepsis. The analepsis and embedded nar-

rative level ends with the conclusion of this chapter. That end point comes at a moment of climax in Dohmler's story (told by Franz), when he finishes making arrangements with Nicole's father and suggests that he go home. At the very beginning of the next chapter, Franz, now in direct speech, and 'back' in the scene that had been left behind for the embedded narrative, concludes the story with his own summation about what happened. We know that this whole story about Dohmler and Warren has been told through dialogue by Franz to Dick, and yet we are not shown most of that dialogue. We are instead given a third-person account in the same style as the rest of the narration in the novel. Despite that mimicking of narrative style, the story is indeed an embedded narrative. We can determine this because the story has has a new focaliser, Dr. Dohmler, despite the fact that the narrator does not change. If we were given a transcription of the scene between Franz and Dick as it happened, but narrated directly by Franz onto the page, so to speak, rather than as direct reported speech, then Franz would be the narrator. As it stands the narrator is the same omniscient one as the rest of the novel. The focaliser does change, however, from an omniscient perspective at times affected by Dick's perspective (and at other times that of Rosemary or Nicole), to Dohmler's perspective. As stated, the story contains Dohmler's judgements and biases. Franz is only able to tell it to Dick because of Dohmler. There is also a doubling of the narratee. Simultaneously, the narratee is still us, the reader, but there is an implied extra narratee of Dick Diver, the listener of the oral version of the narrative that we are not able to witness directly but which we know for certain is happening. When the story concludes, the omniscient but occasionally character-bound focaliser who has been present throughout the rest of the novel returns. At the same time, the narratee returns to being merely the reader, or the vague implied recipient of the story. This subtle changing of focaliser and narratee brings the story to Dick, and to us, after several instances of interpretation and telling. In this case that seems to serve to distance the reader from the story, and emphasise the fact that it has happened in the past and that it cannot be changed. This example shows how mutable the effects of focaliser and narratee can be, and how those things create changes in narrative level.

Other formal devices such as fictional letters and diaries can be used to facilitate changes in focaliser, narrator, and narratee, and thus changes in narrative level. In *Frankenstein*, ostensibly all the embedded narratives are documents that Captain Walton encloses in letters to his sister, which letters form the frame narrative. Those separate documents are in turn given their own sections of the book, so there are parallel delineations between the levels of the narratives, the

fictional documents which contain those narratives, and the sections of the book which represent those documents. Each section has a different narrator and narratee, so must be considered a different narrative level.

There may be some question over whether memories are embedded narratives. Again for guidance we turn to the identity of the narrator. In omniscient third-person narration a memory will be relayed to the reader in the same manner as every other piece of narration. We may be told that a character is remembering something, or we may be merely taken back in time to the remembered event and told about it in narration in the same way that we would be told about anything else in the narration. In these cases there would be no change in narrator or narratee, so there would be no change of narrative level.

A memory might be considered a narrative in itself if it is presented as a story that a character is involuntarily telling to themselves. In that case the narrator may change from the narrator of the rest of the text to the character who is remembering, and the narratee may change from the implied recipient to the character themselves, as they have become more introspective; but this may not apply, the narratee might still be the implied reader of the story, so the narrator may still be telling the memory directly to us. Without a definitive change of narrator or narratee it is difficult to construe a memory as a change in narrative level.

A piece of narration within dialogue that does not constitute a change of narrative levels is evident in Virginia Woolf's *To the Lighthouse*. In the novel's first section, Mrs. Ramsay reads a part of a storybook to her son James, who is a child at this point in the novel. The relevant passage is as follows:

> "The man's heart grew heavy," she read aloud, "and he would not go. He said to himself, 'It is not right,' and yet he went. And when he came to the sea the water was quite purple and dark blue, and grey and thick, and no longer so green and yellow, but it was still quiet. And he stood there and said–" (Woolf, *To the Lighthouse* 42).

In some ways this is similar to our earlier examples, in that this is a narrative contained in dialogue. However, it is not an embedded narrative. The story is being spoken by Mrs. Ramsay, but she is not its narrator relative to the reader. We are hearing her direct speech through the floating omniscient narrator of the novel; this has not changed from the rest of the novel. Similarly, while Mrs. Ramsay is telling the story to James, he is not the narratee, the

narratee is still the implied recipient of the overall story as it already has been for the rest of the novel. Mrs. Ramsay and James are both still part of the same diegetic level as each other and as the dialogue and everything else happening in the novel. Since there is no change in narrator or narratee, there is no change in narrative level here. If the children's story were on a different level, it would be presented to us in a different way. Perhaps we might perceive the story as if we were living it, or through the child James Ramsay's imagination. As it is, the narrative is contained within direct speech which is short and is reported to us in the same fashion as everything else. It has some thematic resonances, in that the idea of characters going down to the beach to think corresponds with other parts of the novel,[2] and the perception of the sea changing colour as one observes it is very similar to what Lily Briscoe experiences in the final section of the novel when she is working on her painting. However, it is not a change of narrative level, it is just dialogue. This kind of example is indicative of how narrative level changes can be complicated to identify. This piece of dialogue has not involved a change in level, while Franz's embedded story in *Tender is the Night* has changed level. We know this despite the fact that we know that story must have been told in dialogue. It has not been presented in that way to us; from our perspective, it is an embedded story because the focaliser and narratee have changed. Those things do not happen in the short fragment of narrative that Mrs. Ramsay speaks. Much depends on the identity of narrator, focaliser, and narratee, in the analysis of changes in narrative level. The significance of those factors will be further elucidated as we now move into close analysis of narrative levels in the novels and hypertexts from this project's corpus.

[2] "Also the sea tosses itself and breaks itself, and should any sleeper fancying that he might find on the beach an answer to his doubts, a sharer of his solitude, throw off his bedclothes and go down by himself to walk on the sand, no image with semblance of serving and divine promptitude comes readily to hand bringing the night to order and making the world reflect the compass of the soul. The hand dwindles in his hand; the voice bellows in his ear. Almost it would appear that it is useless in such confusion to ask the night those questions as to what, and why, and wherefore, which tempt the sleeper from his bed to seek an answer" (Woolf, *To the Lighthouse* 128).

4.7 Narrative levels in modernist novels

4.7.1 *To the Lighthouse*

We have just discussed a potential but ultimately negative example of narrative levels within dialogue from *To the Lighthouse*. While the first and third sections of the novel ("The Window" and "The Lighthouse," which account for the majority of the novel's length) are radical in their representation of the characters' thoughts, perceptions, and memories, these parts of the novel do not use narrative levels particularly. That is, unless one counts memories as embedded narratives. This merits some discussion for a moment.

Memories of characters are used frequently in *To the Lighthouse*. The narrator of the entire first and third sections of the novel (and most of the second section) is always the same. It is an external narrator, not bound to any one of the characters to the exclusion of the others, and it uses the third-person to talk about them, even when it is relaying their thoughts to the narratee (in this case, as often in novels, a vague entity to whom the story is being told). This overall voice is telling the story, and can see into all of the character's minds, and also see things that they cannot. This is a question of focalisation. The narration gives us access to the thoughts of the characters, but it is not limited by the extent of their thoughts. This means that the manner in which the narration allows us access is through variable internal focalisation, as Genette would classify it, where we get the internal perspectives of multiple characters in sequence. When the narration in this novel is not focalised by a character, it switches to zero focalisation, or omniscience. The focaliser changes, but the narrator remains the same. The technique of switching focalisers allows the characters' memories to be represented to the reader as the characters have 'seen' them, while the narrator is still speaking for them, maintaining Genette's distinction between the focaliser as the one who sees and the narrator as the one who speaks. The resulting judgements of that seeing inflect the language used by the narrator; it is still the same entity speaking, but the words that they choose are affected by the focalisation. When used for memories, this technique creates sympathy with the characters and also allows us to experience time somewhat like they do, with memories of the past intruding upon the present moment.

The transition from the present moment into memory does not even involve a change of focaliser in Woolf's novel, and certainly not a change of narrator. This is because often the narration

of the present moment will already be focalised by a particular character, and they move into memory straight away, in mid-paragraph. There is no change in focaliser, and, critically, no change of narrator or narratee. Therefore the memories are on the same diegetic level as the present-set narration around them. They are a natural part of that narration, and are not embedded narratives. They are analepses, yes, because they refer to past events, but they are not changes in narrative level, because the narrator is the same one as it has always been.

We can see this natural flow in the following examples. In the first, the narration is already being focalised by Mrs. Ramsay, and her wonderings about Minta, Andrew, and Nancy are happening in the present moment. In the third sentence of the first paragraph here, we are told that Mrs. Ramsay is trying to make a recollection. For the rest of this paragraph and the next one we are given that recollection, before we return to a description of Mrs. Ramsay reading, in the present:

> But how could Minta say now that she would not have him? Not if she agreed to spend whole afternoons trapesing about the country alone–for Andrew would be off after his crabs–but possibly Nancy was with them. She tried to recall the sight of them standing at the hall door after lunch. There they stood, looking at the sky, wondering about the weather, and she had said, thinking partly to cover their shyness, partly to encourage them to be off (for her sympathies were with Paul),
>
> "There isn't a cloud anywhere within miles," at which she could feel little Charles Tansley, who had followed them out, snigger. But she did it on purpose. Whether Nancy was there or not, she could not be certain, looking from one to the other in her mind's eye.
>
> She read on (Woolf, *To the Lighthouse* 55).

In this whole example, the narration is always in the third person, usually filtering Mrs. Ramsay's thoughts, but she is never actually the speaker; there is no change of narrator at any point. This memory and the narration around it are all the part of the same diegetic level.

A similar phenomenon also occurs in this example, in which Mrs. Ramsay is speaking to Charles Tansley and her thoughts about the current conversation lead her to remember a scene from twenty years before.

> "But how long do they leave men on a Lighthouse?" she asked. He told her. He

> was amazingly well informed. And as he was grateful, and as he liked her, and as he was beginning to enjoy himself, so now, Mrs. Ramsay thought, she could return to that dream land, that unreal but fascinating place, the Mannings' drawing-room at Marlow twenty years ago; where one moved about without haste or anxiety, for there was no future to worry about. She knew what had happened to them, what to her (Woolf, *To the Lighthouse* 93).

Once again, this is all on the same diegetic level. The narrator reports Mrs. Ramsay's speech, then we see that Mrs. Ramsay seems to approve of Tansley (more than the other characters do), and that she then relaxes and remembers a pleasant time at the Mannings' house. We move from externally focalised reporting of the conversation, to narration focalised by Mrs. Ramsay, first focused on the present and then, through analepsis, the past, but all of this is still being relayed to us by the same narrator, so there is no change in narrative level. Mrs. Ramsay's memory is not embedded or told by a new narrator, it is simply a part of her thoughts which were already being indirectly (through the narrator) represented to us.

In another example, from much later in the novel, Lily Briscoe is seated at the breakfast table having arrived back at the house, for the first time in a decade, the night before. She briefly remembers her arrival and then returns to the present moment: "She had come late last night when it was all mysterious, dark. Now she was awake, at her old place at the breakfast table, but alone" (Woolf, *To the Lighthouse* 145). This narration is focalised by Lily, which we know because of the biased nature of the descriptions; the house is not inherently mysterious, that is how she perceives it when she arrives. Both that memory and the present moment have the same narrator, everything is being filtered by an entity which is providing the words and formulating the sentences, rather than letting us see a direct transcription of Lily's thoughts. This strategy is used frequently in the first and third section of the novel; we are relayed memories and thoughts of the characters, but always through the same narrator. Once again, Pier's rules are that "narrative levels are distributed vertically when a change of both (diegetic) level and speaker and/or addressee occurs, and horizontally when no change of speaker takes place (as in a digression) or when several parallel stories are recounted by different speakers but at the same narrative level (as in Boccaccios *Decameron*)" (1). The memories in the first and third sections of *To the Lighthouse* do not correspond with his criteria for vertical narrative levels, nor are they digressions - they are integrated with the rest of the narration around them, a natural result of the flow of thought into reminiscence - nor do they have different speakers.

The narrator is always the same, so these parts of the novel are always on the same narrative level.

The middle section, "Time Passes," is a different story, both figuratively and to an extent literally. It uses narrative level changes, and while they are brief and infrequent, they are quite radical. The narration in this section is very strange and quite different from the other two sections of the novel. It appears to be the same narrator still, as evidenced by the first and last few paragraphs of this section, which are relatively similar in prose style and subject matter to the rest of the novel. However, the rest of the section, while maintaining the same narrator, becomes quite different in tone. This is due to focalisation. Large parts of the rest of the novel, and those small pieces at the beginning and ending of "Time Passes," are focalised by human characters. Most of the rest of "Time Passes" is not. It is instead has a mix of external focalisation and parts that appear to be focalised by non-human entities such as the wind, nature, and what Woolf refers to in the original typescript of the section as "ghostly confidants . . . sharers, comforters" ("Typescript of 'Time Passes"' 1). The externally focalised parts also have a far more distant perspective from the novel's characters and the events of their lives compared to the rest of the novel. This distance allows the narration to consider time differently than the rest of the novel, considering longer amounts of time, so that seasons and years appear to pass quickly. This long view of time is important because it is broken by the narrative level changes that feature occasionally in "Time Passes." Most of the narration in this section is quite general and ethereal, but brief interjections, marked by placement in brackets, suddenly become specific in both content and situation in time. In the following example we can see a paragraph about the wind, speculating about its effects on restless sleepers, but without any specificity about who, or when, these people may be. Immediately following this is a definitive statement of facts, and the narration of a specific point in time, when Mr. Ramsay discovers that Mrs. Ramsay has died:

> The nights now are full of wind and destruction; the trees plunge and bend and their leaves fly helter skelter until the lawn is plastered with them and they lie packed in gutters and choke rain pipes and scatter damp paths. Also the sea tosses itself and breaks itself, and should any sleeper fancying that he might find on the beach an answer to his doubts, a sharer of his solitude, throw off his bedclothes and go down by himself to walk on the sand, no image with semblance of serving and divine promptitude comes readily to hand bringing the night to order and making the world

> reflect the compass of the soul. The hand dwindles in his hand; the voice bellows in his ear. Almost it would appear that it is useless in such confusion to ask the night those questions as to what, and why, and wherefore, which tempt the sleeper from his bed to seek an answer.
>
> [Mr. Ramsay, stumbling along a passage one dark morning, stretched his arms out, but Mrs. Ramsay having died rather suddenly the night before, his arms, though stretched out, remained empty.] (Woolf, *To the Lighthouse* 128).

The majority of this example, and of "Time Passes" takes a different view - has a different seer - than the rest of the novel, but is still narrated in a similar style, meaning it has the same narrator. This interjection, however, sounds like a different entity speaking, not just seeing. It is a completely different prose style, a mere reportage of facts with no empathy. And, crucially, it is extremely specific in its placement in time and its subject matter compared to the (beautiful) vagueness of the preceding paragraph. This suggests a different narrator, and therefore a change of narrative level, in a horizontal structure, because there is no framing or embedding, only interruption. The artifice of the interruption is heightened by its placement inside brackets. It is meant to be abrupt, we are meant to see it as different. It is a different narrative, telling a different story (specific details from definite points in time about people about whom it does not seem to care, rather than general musings about the passage of time and the effects of nature) in a different kind of way (in blunt reportage rather than floral ruminations) to the rest of "Time Passes."

We see the same thing happen later in the section, when the narration moves from poetic wonderings about the seasons to the harsh statement of Prue Ramsay's death:

> Moreover, softened and acquiescent, the spring with her bees humming and gnats dancing threw her cloak about her, veiled her eyes, averted her head, and among passing shadows and flights of small rain seemed to have taken upon her a knowledge of the sorrows of mankind.
>
> [Prue Ramsay died that summer in some illness connected with childbirth, which was indeed a tragedy, people said, everything, they said, had promised so well.]
>
> And now in the heat of summer the wind sent its spies about the house again. Flies wove a web in the sunny rooms; weeds that had grown close to the glass in the night

tapped methodically at the window pane (Woolf, *To the Lighthouse* 132).

Once again we have moved from the general to the specific, from the long view of time to a specific event, and from one prose style to another and back again. The narrator has changed and so has the narrative level. It conforms to Pier's description of horizontal narrative levels as "when several parallel stories are recounted by different speakers but at the same narrative level" (1). The interjections in "Time Passes" are parallel stories, recounted by a different speaker. There is nothing like them in the rest of the novel, and their rareness makes them all the more notable.

4.7.2 *The Sound and the Fury*

William Faulkner's *The Sound and the Fury* uses horizontal narrative levels in quite a different way. This novel has a different narrative style in each of its four sections. Each of those sections has a different narrator. Respectively, they are: Benjy, Quentin, and Jason Compson, and an omniscient third-person narrator. Technically, there is a kind of intermediary entity speaking for Benjy, as his disability does not permit him to use language in the same way as the other characters, but if so this narrator is speaking for Benjy as he would speak if he could: it is supposed to be representing him, and for the context of an argument about narrative levels it has the same effect as if it were Benjy. The use of these different narrators automatically creates horizontal narrative levels, with each section being a different level due to the fact that it has a different narrator.

Benjy and Quentin's sections inspire a question about whether they have multiple horizontal narrative levels within them, because they both both appear to mix narration from different points in time like in *Seed*. We will demonstrate that the narrator is in fact speaking from one point in time in both Benjy and Quentin's sections, and this is because of stream of consciousness, simultaneity, and a practical application of simultaneity which is the reliving of past moments in the present.

Benjy and Quentin's sections both transition frequently between multiple moments in time. Within each of these two sections, the narrator is the entity who is knitting all the temporal strands together; it is the mind of the character that is doing this. The narrator is the mind of the character, unintentionally moving around in time. This movement is unintentional because both Benjy and Quentin are involuntarily remembering events from the past because their minds

have been triggered to do so by events in the present. Moreover, Benjy and Quentin's sections are told in stream of consciousness, and in each of these streams of consciousness there is one narrator, telling one narrative, that flits through time because the mind is flitting through time, reliving things from the past. In each of these two sections, there are not many streams, there is only one. Each of the two streams is disrupted by the reliving of past events in the present, but it remains the same narrative; one stream, told by one narrator, holding many points in time in mind at once. We can see this in the following passage, in which we see first a scene from the past where the child versions of Quentin, Caddy, Jason (not mentioned in this excerpt, but present), and Benjy are playing in the branch (what they call a creek or stream) and Versh is trying to get them to return to the house. The narration then jumps, in the italicised part, to narration of the present, where Luster is trying to hush the adult Benjy, who is standing in the same stream. The narration then jumps back again to relive the moment from the past with the children.

> Quentin climbed up the bank and tried to catch Versh, but Versh ran away and Quentin couldn't. When Quentin came back Versh stopped and hollered that he was going to tell. Caddy told him that if he wouldn't tell, they'd let him come back. So Versh said he wouldn't, and they let him.
>
> "Now I guess you're satisfied." Quentin said. "We'll both get whipped now."
>
> "I dont care." Caddy said. "I'll run away."
>
> "Yes you will." Quentin said.
>
> "I'll run away and never come back." Caddy said. I began to cry. Caddy turned around and said "Hush" So I hushed. Then they played in the branch. Jason was playing too. He was by himself further down the branch. Versh came around the bush and lifted me down into the water again. Caddy was all wet and muddy behind, and I started to cry and she came and squatted in the water.
>
> "Hush now." she said. "I'm not going to run away." So I hushed. Caddy smelled like trees in the rain.
>
> *What is the matter with you, Luster said. Cant you get done with that moaning and play in the branch like folks.*
>
> *Whyn't you take him on home. Didn't they told you not to take him off the place.*

He still think they own this pasture, Luster said. Cant nobody see down here from the house, noways.

We can. And folks dont like to look at a looney. Taint no luck in it.

Roskus came and said to come to supper and Caddy said it wasn't supper time yet.

"Yes tis." Roskus said. "Dilsey say for you all to come on to the house. Bring them on, Versh." He went up the hill, where the cow was lowing (Faulkner 12-13).

The association of being in the branch is creating the jump, but Benjy as character and as narrator is not conscious of this connection. He experiences both the past and the present events as if they are happening presently, and describes them as such. The narrator is unconsciously making this connection though, from the present. The past moment is not coming to us from the past, it is being relayed by the narrator in the present. The narrator is holding past and present in their mind simultaneously. The perspective is that of the narrator in the present, reliving the past. The narrator remains the same.

We can observe a similar phenomenon occurring in Quentin's section of the novel. As with Benjy's section, the narrator in the present relives many moments from the past. In the following example, the first six words are Quentin quoting Caddy's then-boyfriend (and future fiancé) Herbert Head the first time he meets him. Then there are two sentences describing an event that happened several years before the meeting with Head: Caddy as a child kissing a boy. We then flash forward again to the scene with Head, and the first italicised segment flashes much further forward, to Benjy's reaction to Caddy running on her wedding day. Then, with "that could drive up . . ." we go back to Quentin's memory of his thoughts during his first conversation with Head, and then in the final italicised part we flash back just a couple of minutes or so, to Quentin being introduced to Head (whereas in the other parts he is already speaking, so this is a very slight analepsis).

Harvard my Harvard boy Harvard harvard That pimple-faced infant she met at the field-meet with colored ribbons. Skulking along the fence trying to whistle her out like a puppy. Because they couldn't cajole him into the diningroom Mother believed he had some sort of spell he was going to cast on her when he got her alone. Yet any blackguard *He was lying beside the box under the window bellowing* that could drive up in a limousine with a flower in his buttonhole. *Harvard. Quentin this is*

Herbert. My Harvard boy. Herbert will be a big brother has already promised Jason (Faulkner 59).

The hypertext edition of the novel by Stoicheff, Muri, Deshaye, et al. is very helpful in elucidating the minutiae of the different time periods in Quentin's section. In this one paragraph alone there are fragments reliving four different moments in time: the child Quentin seeing Caddy kissing a boy, the adult Quentin being introduced to Head, the moments-older Quentin listening to Head speak, and the slightly-older-again Quentin hearing Benjy on Caddy's wedding day. In this section the memories create a cacophony of conflicting moments vying for attention, both in the narrative and in the chaotic thoughts and intruding memories of Quentin on his last day alive. This is an example of Bergson's concept of simultaneity in action. Quentin, like Benjy, is holding all these moments from the past in his mind simultaneously with the present. As the narrator is speaking from one point in the present, we can speculate that in Quentin's case he is speaking from an instant before his death perhaps. The focaliser is the one who is in the past. The events are focalised by the past version of the character, but narrated by the present version of them. The narrator never changes, they hold past and present together. As a result, the narrative level does not change within these sections. This all correlates with the fact that throughout his writing Faulkner is interested in the idea of the past persisting with us. This is captured by Benjy and Quentin's sections, where a single narrator can hold many moments simultaneously in mind, and therefore stay on one narrative level.

The narration in Jason's section is simpler. It is not stream of consciousness, and there is no ambiguity about narrative levels here because Jason's section is narrated in a more conventional form, which makes it easy to see that it is coming from one perspective. While supposedly the rational breadwinner of the family, he is actually quite frantic and as obsessed with the past as any of his siblings. With his instances of analepsis, the narrator is unambiguously situated in the present and referring back to past events, so the narrator again does not change, so we do not have changes of narrative levels. The present version of Jason is always the one who is speaking, and his memories bear relation to his current experience. We can see this in the following example, in which Jason reports a conversation he is having in the present about Babe Ruth, then goes outside and sees that the streetlights are coming on, and remembers the installation of the streetlights outside the courthouse, before returning his thoughts to the present and his journey home.

> "I wouldn't bet on any team that fellow Ruth played on," I says. "Even if I knew it was going to win."
>
> "Yes?" Mac says.
>
> "I can name you a dozen men in either league who're more valuable than he is," I says.
>
> "What have you got against Ruth?" Mac says.
>
> "Nothing," I says. "I haven't got any thing against him. I dont even like to look at his picture." I went on out. The lights were coming on, and people going along the streets toward home. Sometimes the sparrows never got still until full dark. The night they turned on the new lights around the courthouse it waked them up and they were flying around and blundering into the lights all night long. They kept it up two or three nights, then one morning they were all gone. Then after about two months they all came back again.
>
> I drove on home. There were no lights in the house yet, but they'd all be looking out the windows, and Dilsey jawing away in the kitchen like it was her own food she was having to keep hot until I got there (Faulkner 157-8).

This is an analepsis, because it refers to the past, but it is not a change of narrative level. The account of the past event is being spoken by Jason in the present. We have not been transported to the past to hear from the past version of Jason, this is very much the present version referring backwards in order to complement what is happening currently. The narrator remains the same, so there is no change in narrative level.

In the final section of the novel, there is a brief analepsis in an early description of Dilsey, referring to how she used to look at the beginning of the second sentence of this paragraph, before returning to the present:

> The gown fell gauntly from her shoulders, across her fallen breasts, then tightened upon her paunch and fell again, ballooning a little above the nether garments which she would remove layer by layer as the spring accomplished and the warm days, in color regal and moribund. She had been a big woman once but now her skeleton rose, draped loosely in unpadded skin that tightened again upon a paunch almost dropsical, as though muscle and tissue had been courage or fortitude which the days

> or the years had consumed until only the indomitable skeleton was left rising like a ruin or a landmark above the somnolent and impervious guts, and above that the collapsed face that gave the impression of the bones themselves being outside the flesh, lifted into the driving day with an expression at once fatalistic and of a child's astonished disappointment, until she turned and entered the house again and closed the door (Faulkner 165).

Like in the other three sections, the speaker here is reflecting on the past from a position of present experience. There is not a separate speaker in the past telling us about what Dilsey was like then. The narration has not left the current moment. Apart from that reference, this section is focused entirely on the present. It proceeds in chronological order, and is told by one voice, which sympathises with the characters on which it focuses, but sees all. The voice never changes, and neither do any narrative levels; this section is one narrative from beginning to end. The changing narrators and narrative styles in the four sections of *The Sound and the Fury* provide multiple ways of interrogating the past from the present. They may not change narrative level within their sections, but Benjy and Quentin's sections provide fascinating examples of simultaneity in action, and the other two sections consolidate the reader's picture of the events that have occurred. The four narrative levels combine to tell the story in a multifaceted way that engages with the past and its lasting effect on the present.

4.7.3 *The House in Paris*

Elizabeth Bowen's *The House in Paris* does not feature such overtly experimental narrative techniques as are found in *To the Lighthouse* (and particularly the "Time Passes" section) or *The Sound and the Fury*, but it does still use very nuanced techniques in its focalisation by its characters. The novel is never narrated directly by the characters; the narrator of the novel is always the same omniscient third-person narrator,[3] and thus is always on the same narrative level, even when it uses transcriptions of letters written by characters. Letters and telegrams serve important plot functions in *The House in Paris*, and in a sense they are embedded texts because they are complete texts that are represented as they would appear diegetically to the characters, but they are not embedded narratives because they are not narratives in themselves. Rather they contain narratives. As well as some instances of narration, letters often contain

[3] A narrator who, it is made clear, can see into the futures of these characters.

mere statements of fact, opinions, or questions, similar to the content of dialogue. The letter as a whole cannot be considered a narrative. Furthermore, the narrator who is providing the letter to the narratee is the same narrator as the rest of the novel. Rimmon-Kenan compares transcribed letters to direct speech: even though we are seeing exactly what the character has written, this information is still being relayed to us by a narrator. It may be verbatim, but it is still being reported by an intermediary: in *The House in Paris* that is the same narrator as the rest of the novel. As Rimmon-Kenan states, "there is always a teller in the tale, at least in the sense that any utterance or record of an utterance presupposes someone who has uttered it. Even when a narrative text presents passages of pure dialogue, manuscript found in a bottle, or forgotten letters and diaries, there is in addition to the speakers or writers of this discourse a 'higher' narratorial authority responsible for 'quoting' the dialogue or 'transcribing' the written records" (88). As the narrator does not change when the letters are reported, and they are not full narratives in themselves anyway (rather they occasionally contain stories), the letters in *The House in Paris* must be considered to be on the same narrative level as the rest of the novel, a level which is never changed. The novel does other fascinating things with both analepsis and prolepsis (not least in having the majority of the novel take place in one long analepsis) and with character-bound focalisation[4] and free indirect discourse, but it does not use changes of narrative level.

4.7.4 *Pointed Roofs*

Similarly, *Pointed Roofs* by Dorothy Richardson does not use changes in narrative level, but it does use very close free-indirect-discourse narration. As has been stated, this thesis's working criteria for a change in narrative level is a change in narrator and/or narratee. These things do not happen in Richardson's novel. The narrator and narratee always remain the same. The narratee is an unspecified entity, in the place of the reader. The narrator is a third party who, while adhering very closely to the protagonist Miriam Henderson's thoughts, is not her. As such the narration is focalised by Miriam, but never spoken directly by her. The narratee is not told about any action in the story for which Miriam is not present, but she is still not the narrator. There are even times when the narration appears to become more closely linked to

[4]Bowen's narration is somewhat similar to Woolf in its movement from character to character in focalisation, but it does not get as close to them as Woolf's narration does, the words are not as changed by the characters as they are in Woolf's narration.

Miriam's thoughts than at other times, but Miriam is still referred to as 'she,' rather than 'I'; there is still another entity speaking instead of her, even when the text becomes ungrammatical and uses ellipses to separate sentence fragments. We can see the move from full sentences into fragments in the following example, but the narrator does not change:

> She stopped at the landing window, tucking the frayed end of the petersham under the frame of the buckle... they were all downstairs, liking her. She could not face them. She was too excited and too shy. ... She had never once thought of their "feeling" her going away... saying goodbye to each one... all minding and sorry–even the servants. She glanced fearfully out into the garden, seeing nothing (Richardson 10).

This is the closest thing to a change in narrative voice, because the style of the prose does change slightly, but Miriam still does not get to speak for herself. This is free-indirect-discourse narration, giving Miriam's perspective but she is not the speaker. This contradicts May Sinclair's characterisation of Richardson's novel as stream of consciousness. Sinclair says that Richardson takes the reader on a plunge into the protagonist's consciousness. This is true; we are afforded more access to the protagonist's perceptions as they happen than was afforded in most previous fiction. This does not necessarily mean that the narration is stream of consciousness though. Sinclair wrote the following referring directly to Richardson the writer rather than the narrator of *Pointed Roofs*: "She must not be the wise, all-knowing author. She must be Miriam Henderson. She must not know or divine anything that Miriam does not know or divine; she must not see anything that Miriam does not see. She has taken Miriam's nature upon her. She is not concerned, in the way that other novelists are concerned with character. Of the persons who move through Miriam's world you know nothing but what Miriam knows" (58). Again those things are all true about this novel, but they are not definite signifiers of stream of consciousness as we would understand it today. The plunge into immersion that Sinclair describes can still be true of free indirect discourse as well as of stream of consciousness.

The narration in *Pointed Roofs* cannot be called stream of consciousness when compared to that found in *A Portrait of the Artist as a Young Man*,[5] parts of *Ulysses*, or the first two sections of *The Sound and the Fury*. In those, the narrator and focaliser are the same entity,

[5]Indeed Sinclair acknowledges that Richardson is not the first to take a plunge into a character's conciousness, and that Joyce plunges deeper in Portrait.

the character, relaying their own thoughts. In *Pointed Roofs* the focaliser and narrator are separate. Sinclair was the first person to use the term *stream of consciousness* to discuss fiction. This is not an argument against her essay exactly, she was right that Richardson's narration is revolutionary. This is merely to state that Richardson's novel does not use stream of consciousness as this thesis conceives it, so there are no changes in the novel from non-stream-of-consciousness prose to stream-of-consciousness prose, so there are no changes in narrator from the third-party narrator to Miriam herself, so there are no changes in narrative level.

As a final example, here we see an extended example of narration that is indebted to Miriam's consciousness but is not exactly stream-of-consciousness narration. This paragraph is ungrammatical and is following Miriam's thoughts, and the words are heavily affected by those thoughts, but it's still not Miriam speaking, it's another narrator:

> Monsieur... had talked French all the time... dictees... lectures... Le Conscrit... Waterloo... La Maison Deserte... his careful voice reading on and on... until the room disappeared.. .. She must do that for her German girls. Read English to them and make them happy.... But first there must be verbs... there had been cahiers of them... first, second, third conjugation.... It was impudence, an impudent invasion... the dreadful clever, foreign school.... They would laugh at her.... She began to repeat the English alphabet.... She doubted whether, faced with a class, she could reach the end without a mistake.... She reached Z and went on to the parts of speech (Richardson 15).

Miriam would not refer to herself in the third person in her own mind. She is the focaliser, but not the narrator. As a result, the narrator of this novel never changes. Some passages may be focalised by Miriam to a greater or lesser extent - with some sentences seeming more like direct objective reportage of facts, with others being Miriam's thoughts and opinions - but the narrator does not change, and neither does the narratee, so the narrative level does not change either.

4.7.5 *Tender is the Night*

Tender is the Night does not feature frequent narrative level changes, and the narrator is usually the same for the vast majority of the novel. Apart from the embedded Dr Dohmler narrative mentioned earlier, there is one other clear change of narrative level, in a short section narrated

by Nicole Diver in Chapter 10 of Book Two, very close to the middle of the novel. For most of the novel, the narrator is an entity who often allows the narration to be focalised by one of the main characters (usually either Rosemary Hoyt, Dick Diver, or Nicole Diver) but still speaks for the characters instead of allowing them to speak for themselves, and retains the ability to go back to an omniscient perspective. The section in Book Two, Chapter 10, however, has a different narrator: it is told directly by Nicole, and it is a fully-formed narrative in itself, telling the story of several years of Nicole and Dick's lives quite quickly, and all from Nicole's perspective. This makes it truly a separate narrative level, horizontally structured relative to the rest of the novel (because it is not embedded vertically). This narrative is also distinguished visually by its use of ellipses to separate paragraphs, which is different in style from the rest of the novel. This use of ellipses emphasises the passage of time: we are hearing about some of the major events of Nicole and Dick's lives - moving house, the success of Dick's book, the birth of their children - but the ellipses signal that there is also a lot more happening in between that we do not hear about. Overall this narrative fills in the gaps in the story between the beginning of the Divers' marriage, and its troubled current state, and acts as a bridge in the novel between a past scene of Dick negotiating with Nicole's sister Baby over her family's finances and his marriage proposal, to a scene in the present with Dick at a Parisian cafe talking with Rosemary's mother. The narrative between provides us with Nicole's impressionistic view of her marriage and its decline. It is also told primarily in the present tense rather than the past tense like the rest of the novel. An example of the impressionistic style, flitting between details, and the use of the present tense, can be seen when Nicole considers a property purchase and then moves on to talking about wine: ". . . That seems unreasonable, Dick–we have every reason for taking the bigger apartment. Why should we penalize ourselves just because there's more Warren money than Diver money. Oh, thank you, cameriere, but we've changed our minds. This English clergyman tells us that your wine here in Orvieto is excellent. It doesn't travel? That must be why we have never heard of it, because we love wine" (Fitzgerald 170). The narration is not quite stream of consciousness, as it is not really Nicole's inner monologue to herself so much as it appears to be her (albeit perhaps mentally) addressing a series of people, making the narratee at various times unnamed lawyers, doctors, and, usually, Dick. This means that the narratee is also different from the unspecified narratee of the rest of the novel, but Nicole's position as narrator is enough on its own to make this a new narrative level. The fact that Nicole is not only the seer but also the speaker of this section marks it as a separate narrative level from the

rest of the novel.

4.7.6 *Three Lives*

Three Lives by Gertrude Stein has different prose styles in each of its three sections. Each section has its own voice, and if we conceive of each section having its own narrator, then each of the three sections is a distinct, horizontally structured narrative level. There is no narrative embedding, the sections are all on the same diegetic level relative to one another, but they are distinct narratives told by a different entity, and presented together as a whole text. Each section, "The Good Anna," "Melanctha," and "The Gentle Lena," has its own narrator that remains consistent, so within each of them there is no change in narrative level, and their stories are told in relatively linear fashion. The innovation is in the changing voice. In "The Good Anna," the narrator is omniscient, with the focaliser also floating high above the characters. The narrator is not character-bound, and is in fact at times quite judgemental of the protagonist. For example the narrator will refer to "Anna's maiden german mind," and even when describing a happy scene will do so in a way that comments on Anna's appearance, such as her "worn, thin, lined, determined face would form for itself new and humorous creases, and her pale blue eyes would kindle with humour and with joy as her doctor burst into his hearty laugh" (Stein 23). This is probably not how a character would choose to describe herself. The narrator in "Melanctha" also speaks in the third person, and passes judgement on the characters, but uses a different prose style than "The Good Anna," with more overt syntactical repetition. "Melanctha" features many paragraphs in which the first word is the name of the person that paragraph is focused on, sometimes their full name, sometimes just their first name. This in itself establishes a certain rhythm. Then parts of sentences will be repeated. For example, on one page, the narrator states that "Melanctha had not loved her father and her mother and they had found it very troublesome to have her" (Stein 63). This is a full paragraph. The third-next paragraph opens with the sentence: "The young Melanctha did not love her father and her mother, and she had a break neck courage, and a tongue that could be very nasty" (Stein 63). The very next paragraph after this begins with "Melanctha Herbert had always had a break neck courage" (Stein 63). This deliberately repetitive narrative voice is patently quite different from the narrator in "The Good Anna," and prefigures Stein's later work with repetition in *The Making of Americans*. The narrator of *Three Lives*'s third section, "The Gentle Lena," is a different voice again, but is more similar to that in "The Good Anna" rather than "Melanctha";

it still has some syntactical repetition but not nearly as frequently as "Melanctha." Because the narrator changes with each section, these are horizontal narrative levels. Usually in a novel, a chapter change would not be a change of narrative level, but there would not normally be a change of narrator with a chapter change. A short story collection can contain many different narrators. However, this is because a collection contains many different short stories, which have usually been published separately already. The stories are essentially separate texts, so a collection cannot be said to contain changes in narrative level in the same way that a novel can. Any narrative level changes would have to be within the individual stories themselves. But Stein's text is not a collection of short stories, the three sections were written together as a piece and always intended to be published together as one book. As a result *Three Lives* can be said to have changes in narrative level because it was always published all together in this way, and its narrator changes with each section, creating horizontal narrative levels.

4.8 Narrative levels in hypertext fiction

4.8.1 *Twelve Blue*

Michael Joyce's 1995 hypertext *Twelve Blue*, while featuring many stories, some of which overlap, maintains the same narrator for most of its sections, and so stays on the same narrative level - each story, and each hypertext lexia, is equal to all the others, and is told by the same speaker, despite giving multiple characters' perspectives. The characters are the changing focalisers of the text, but they are always mediated by the same narrator, with one small exception, to which we will return shortly. Usually, a lexia will focus on a particular character, and the narration will move from objective statements of fact into closer representation of the character's thoughts, but will still be always mediated, and told in the third person. In the first part of section 4, we get a description of the character Lee fishing, and then hear what she is thinking relayed by the narrator: "She looked out on the creek and measured out the threads like the fates, silk thread in twelve shades of blue. (Is pink blue? Is yellow or purple? She supposed so, she believed in her stories.)" (Joyce). Similar to this, the narrator occasionally reports characters' thoughts, but always specifies 'he thought' or 'she thought.' The characters are the focalisers, but they do not speak for themselves, so the level remains the same.

There are two exceptions. One is an embedded narrative told by the character Javier to a

colleague of his in section 3 part 2 of *Twelve Blue*. The story is something that happened to Javier before, so it is an analepsis. It is an embedded narrative because for most of the story it is not told in reported speech (even though we know that speech is occurring) but is instead told directly by Javier rather than the usual narrator. At this point Javier's colleague becomes the narratee rather than the unspecified narratee of the rest of the text. Javier narrates his own story, in a conversational style, saying that "I was in med school, quite used to cadavers and death on the floors and wards, or so I believed. I was walking, it was white hot did I say?, along the river toward Hancher auditorium. Anner Bylsma was playing Bach there that day, the cello sonatas, a matinee" (Joyce). Javier is the narrator, and his colleague is the narratee, so those have both changed, and his story exists on a deeper diegetic level than the rest of the lexia that contains it - it is a story within a story - so it is an instance of a change of narrative levels.

The narration switches back to the other narrator before the end of the story, either because of Javier's dissociation from the shock of the reveal that the fishermen he spotted had pulled a dolphin from the river, or because Javier's annoyance at the interruptions of his colleague is breaking his own immersion in the story. Both of those events are recounted right before the narration switches to its usual format, referring now to Javier in the third person: "It was a dolphin (he said), he realized they were steadying a dolphin in the river and that it was dead" (Joyce). So, only part of Javier's anecdote is told in the embedded narrative level. The rest is essentially just a regular instance of analepsis, being told by the third-party narrator to the unspecified narratee, rather than directly by Javier to his colleague. *Twelve Blue* has come out of its brief diversion into an embedded narrative level and resumed the narrative style that it uses for the rest of the text.

The other exception in *Twelve Blue* is the fable which is told in the lexia "sl6_12" about a Chinese poet falling out of a boat because he fell in love with the moon's reflection in the water (we see here how themes around water and fishing recur in the text). Most of this lexia is narrated by an omniscient third-person entity and focalised by an unnamed protagonist. The protagonist remembers the story of the poet, which her mother had told her years before. The main narrator of this lexia recedes and the story of the poet is presented as it would have been told by the protagonist's mother, and presumably by the generations of other tellers from whom she heard it. The narratee also changes, as the story is being told as it would have been told to the protagonist when she was younger; she has become the narratee for the embedded story,

rather than the audience-entity who has been the narratee for most of *Twelve Blue*. The story is presented whole, and is explicitly introduced as a story; it is embedded vertically. The narrator and narratee have changed, so this is a change of narrative levels. Joyce's text uses these sparingly, as we can see, and both instances involve significant memories for the protagonists of the lexias in which they occur, and both are memories that involve water. In *Twelve Blue*, memory is like a body of water in which the characters must dive for insight or reflection.

4.8.2 *Seed*

Joanna Walsh's contemporary hypertext fiction *Seed* uses narrative levels that are horizontally structured, if not in a strictly typical way. *Seed* features these horizontally-structured narrative levels in many, but not all, of its lexias. Many of *Seed*'s lexias feature intense, thought-filled narration about a particular topic, scene, or day. The words of these lexias are shown on the screen in a standard roman font. However, many lexias feature italicised sentences or paragraphs preceding, succeeding, or interspersed with the normal font, and the italicised passages describe events that are different to those being discussed in the passages in roman font. As a result, these lexias feature two parallel narratives, presented together but describing different things. The italicised narratives are recognisably told by the same narrator and occur during roughly the same time period: the summer of 1988, which *Seed* asserts specifically in its title-pages for each sequence of lexias, showing that in total the text covers the months from June to September of that year. Beyond that, due to the style of narration there are no markers for telling whether an italicised narrative is occurring before or after its non-italicised parallel narrative. There must be a temporal shift, for the narrator is the same character, and cannot be in two places at once, but at any given change it cannot be definitively stated whether the shift is an analepsis or prolepsis. What can be definitively stated is that neither of these separate narratives is nested inside the other, they are on equal levels in terms of diegesis. This suggests that they should be classified as horizontal narrative levels. However, there is one issue with this: the standard version of horizontal narrative levels describes parallel narratives which are on the same diegetic level relative to each other, but have one overarching frame narrative to which they all bear the same relation. *Seed* does not have a frame narrative, only the parallel ones. Due to its nature as a hypertext, it has a structural frame in the form of its menu screen from which a reader can select any lexia, but this is not a narrative. It bears closer relation to paratext in a printed book, such as a table of contents. While *Seed*'s parallel narratives differ from the standard conception

of horizontal narrative levels in this way, they otherwise match this model. We can return to John Pier's definition of horizontal narrative levels occurring "when no change of speaker takes place (as in a digression) or when several parallel stories are recounted by different speakers but at the same narrative level (as in Boccaccios *Decameron*)" (1). Depending on how one defines the narrator of *Seed*, it can conform to either of these stipulations. The narrator of *Seed* is always the same character, an unnamed teenage girl. This fits Pier's definition for horizontal narratives where no change of speaker takes place - it is always the same character speaking, just at a different time. However, technically, in terms of their function in the narratives, it can be argued that there are actually two narrators in the lexias where parallel narratives occur, because the narrator of each of the parallel narratives is from a different specific point in time, so will have a different set of memories and biases, and therefore is narrating from a different perspective, in essence becoming a different narrator. In this sense Walsh's text conforms to Pier's second stipulation of a series of stories told by different speakers. *Seed* certainly does not employ vertically structured narrative levels: there are no embedded or frame narratives. The lexias being discussed do not feature a "change of both (diegetic) level and speaker and/or addressee" (Pier 1), only a change of speaker. They must be described as having horizontal narrative levels.

An example of the parallel narrative levels in *Seed* can be seen in this early passage. One narrative, presented in roman font, features the narrator putting on her Walkman as she is about to leave the cattery where she holds a summer job. The other narrative is thematically related to this, but describes a completely separate series of events. In this narrative, presented in italicised font, the narrator describes a stream and valley in her local area, and then the process of making a mixtape at home.

> I have a Walkman. The headphones have two parts. They slide against each other for carrying. The fit is not perfect. I slide them carefully. I do not over-slide them. When they hit home, they rattle.
>
> *The ridge looks over a valley. In the valley are yellow fields. At the bottom of the valley is a river.*
>
> I clip the Walkman on my belt.
>
> The sponge in my ears. I can feel metal inside the sponge.

It is not a river. It is a stream. At home I make a new mixtape.

I mean they're not cages. I don't know what else to call them.

I place the tape recorder as near as I can to the radio. They must both be plugged in. I can stretch the leads so they're twenty centimetres apart. The radio is a clock radio alarm. I switch on the radio and the tape recorder at the same time. The radio plays the top 40.

Enclosures? (Walsh).

These two narratives are clearly occurring at different times and in different places: the cattery in one, and the stream and house in the other. It is unclear which narrative happens first in story time. In the cattery the narrator could have been listening to a different tape than the mixtape that she makes at home. As a result it cannot be specified whether the italicised narrative constitutes an analepsis or prolepsis (although it has to be one of them).

While the narrator of each parallel narrative is the same character, they can be said to function as two different narrators because the character is in a different time and a different frame of mind, with a desire to talk about different subject matter. Essentially there are twin narrators. The two narratives do not relate to one another directly in terms of plot, they only have similar thematic resonances because they both mention tapes, but in different contexts. That association is somewhat imitative of the associative mental process which spark jumps of thought between subjects in modernist stream-of-consciousness narration. In *Seed*, the narratee is always the same undefined entity. The story is not being told to a character, but is being told to a vague non-personified listener, in a tone that is immediate, thoughtful, and confessional. The narratives in this example may not be embedded in any further levels, but they are telling separate stories, by functionally different narrators, in the same textual space. This all serves to create a valuable sense of disorientation for the reader which reflects the disorientation of teenage experience. There is also a possibility that part of the function of this oblique narrative structure is to mirror the effect of trauma on the mind, the involuntary repression or obfuscation of memory. There appears to be a traumatic event at the climactic party scene late in the story, but it is not described directly, only referred to obliquely. The narrative structure creates barriers to our understanding as readers just as the narrator's mind creates barriers to her own understanding of what has happened. Mostly, however, the text and its use of narrative levels serve to evoke the disorientation and intensity of teenage experience, with all of its conflicting

influences, cultural ephemera (in this case in the form of pop music, magazines, fashion, and television) and sensory inputs which we are not yet fully equipped to process. Ultimately *Seed* is an innovative new version (not least given its use of visual floral imagery in its interface) of an old-fashioned hypertext, which operates in a familiar tradition of storytelling: a coming-of-age narrative which deliberately disorientates the reader in order to imitate the violent and confusing experience of growing up.

4.8.3 *Voyage Into the Unknown*

Roderick Coover's *Voyage Into the Unknown* uses narrative levels in a much more recognisable way than *Seed*, using the familiar format of the epistolary story, updated into a thoughtful hypertext which uses the space on the screen to convey plot information and comment on American colonial expansion. Coover's story uses sidescrolling across an impressionistic visual representation of the Colorado river valley to tell the story of a party of geographers led by John Wesley Powell in 1869. The work uses four identifiably different narrators spread over two diegetic levels. On the upper level is a modern, detached, and anonymous observer who introduces the story, occasionally comments on events throughout the story, and provides extensive contextual information at the end about the real Powell and his expeditions, on which the work is based. This is frame narration. On the second, embedded level the story is told in various diary entries written by ordinary crew members George Young Bradley and John Colton Sumner, and Powell himself. The frame narrator addresses the narratee directly in the second person and identifies them as Bradley, or at least as someone imagining that they are role-playing that part. The introduction says "On May 25, 1869, you join the crew of one-armed Civil War veteran John Wesley Powell along with eight other fellow veterans, hunters and trappers, in an attempt to be the first to navigate the Colorado River . . . What do you discover there, Mr. Bradley? And, what will you say to others?" (Coover). In the main part of the story this narrator interjects with statements like "You are not the first here" and "you write on wet paper" (Coover). Sumner's contribution to the embedded narrative is minimal, he has one diary entry about the naming of a canyon. Most of the epistolary narrative is told by Powell and Bradley. Powell as the leader is eloquent and bombastic in his entries, making pronouncements like "In mapping the unknown, we name it for generations to come. Some places we name for their beauty. Others we name because they are markers of of what we have faced and what others will surely face again, although perhaps these places have already

been named long before in other tongues," while Bradley is much more honest about conveying the difficulties of the journey, noting at one point that the "fish are no longer biting, the flour is wet and full of lumps, and none of these hunters on board have been able to bring in the bacon" (Coover). This discrepancy in tone reveals that both characters are somewhat aware of their roles in actively constructing a narrative about their journey, just as they are trying to construct a map of the unknown (to them) territory through which they are moving. Their narratee is future generations, or whoever will read their diaries. Meanwhile the frame narrator is well aware of the constructed nature of the text as a whole, so much so that they play with the boundaries between narratives by addressing the narratee sometimes as Powell, and is also able to use this knowledge to introduce ironies, like remarking that "The crew raid a field of vegetables being grown by local natives: everything goes into the pot. Later, you feel sick to the stomach. Others are vomiting the remains of boiled potato tops." Powell's embedded account of this same incident presents it, incongruously, as a permitted use of freely-given resources, rather than a 'raid,' as the more objective frame narration calls it:

> Last winter a man named Johnson, a hunter and Indian trader, visited us at our camp in White River Valley. This man has an Indian wife, and, having no fixed home, usually travels with one of the Ute bands. He informed me that it was his intention to plant some corn, potatoes, and other vegetables on this island in the spring, and, knowing that we would pass it, invited us to stop and help our selves, even if he should not be there; so we land and go out on the island (Coover).

In examples like this the vertical level structure is being utilised to make points about the colonial abuses of the expansionist United States in the nineteenth century. The text's use of different narrators, on different diegetic levels speaking form different points in history with different perspectives, is very effective in communicating this nuanced message.

4.8.4 *Uncle Roger*

Judy Malloy's early hypertext fiction *Uncle Roger* has one narrator for all its lexias: the character Jenny, who tells the story in the first person. The narrator does not change, so as a result there are no narrative level changes either. There is one possible complication to this, which will now be raised and resolved.

This concerns epistolary narratives, and what constitutes one. At one point in the hypertext,

Jenny describes herself sitting outside a cafe and writing in a blue notebook. She is ostensibly writing down her memories of an afternoon some weeks or months previously which she spent with her ex-boyfriend David. We are then presented with lexias about that afternoon (if one reads the text in the numerical order of its HTML pages). However, Jenny also says that "The things I wrote in the blue notebook didn't happen in exactly the way I wrote them" (Malloy). There is no indication that the narration of the memory of the afternoon with David is transcribed for us as it appears in the blue notebook. Jenny's note that the day did not happen the way she wrote it only heightens this uncertainty. Given that her account of that afternoon begins on the lexia numbered immediately after the one where she makes her assertion about the blue notebook version not being exactly true, it is very possible that the account we read is Jenny narrating the true version of what happened that afternoon to the narratee, rather than the false version she claims to have written in the blue notebook. As such what we read could be a kind of correction of her own written narrative, to set the record straight. In addition, Jenny's account of the afternoon with David is given in the same prose style as the whole rest of *Uncle Roger*; if it was a faithful transcription of written pages perhaps Jenny's writing style would be different. It seems most likely that there is no actual epistolary section here, and that Jenny's anecdote is on the same diegetic level as every other part of *Uncle Roger*, and that it is an analepsis but not an embedded narrative level. Ultimately, the narrator in *Uncle Roger* does not change, so there is no change in narrative level.

4.8.5 *my body - a Wunderkammer*

Shelley Jackson's *my body - a Wunderkammer* uses narrative levels to tell stories from the narrator's past, framed by her current experience. This hypertext is divided into lexias which each represent a part of the narrator's body. Most of these lexias contain narratives on two levels. One level features the present version of the narrator, talking about her body. A specific detail tends to trigger the transition of the narrative to another level, where the narrator will tell a story from her past. This phenomenon is visible in a lexia when the narrator at first describes her nose in the present tense, and when she mentions the fact that it is pierced she tells the narrative in the past tense of how she got her nose pierced. In the following example the narrative level changes with the second sentence of the second paragraph, when the tense changes from the present tense to the past tense. The narrator is now consciously telling the narratee a specific story rather than generally describing her body as it currently is. This is

distinct from a structure where another narrative would be happening with no conscious gesture towards the other one, as in *Seed*, and as such is one of the reasons why this level structure is vertical rather than horizontal as it is in Walsh's text. The adult narrator is deliberately letting the child narrator speak.

> Things I can do with my nose: I can wrinkle it in distaste. I can wiggle my nostrils rhythmically. I can 'make a long nose.' I can thrust it into small, tight places. I can nuzzle things softly. I can blow streams of bubbles underwater. I can make a loud reproachful sound, like a krummhorn.
>
> My nose is pierced on the left side. The operation was quick and antiseptic, an ink dot placed, wiped off, replaced, a smooth little wooden rod up my nose, a deep breath, the needle plunged through. The ring slid in and pushed out the needle. The only raw and beautiful thing about it was the sudden hapless surge of tears to my left eye, which instantly overflowed down my cheek (Jackson).

The technique of focusing on details about the body as springboards for jumping into embedded stories and analepses works to formally evoke the effect of the passage of time on one's body, and on one's personality. The nesting of the narrative levels in *my body - a Wunderkammer* is vertical, even if the depth reached is not very great - the embedded narratives never descend more than one level below their frames. The narratives descend and then return back up to the frame, or else the lexia ends. Either way, there is no moving on to another narrative on the same level, as would be the case with horizontally arranged narrative levels. The movement is from the extradiegetic frame narratives of the present to the intradiegetic embedded narratives of the past. The level changes despite the fact that the narrator of both levels is the same person, because for the purposes of narration there is a difference between the narrator as a child (or teenager) and the narrator as an adult. The childhood experiences are filtered through the perspective of the child narrator, while the present parts are viewed by the narrator as an adult, so in narrative terms these function as two different narrators with different biases and judgements. The narratee remains the same; it is always the same imagined and implied recipient.

In the above example, the first level is extradiegetic while the second-degree level is intradiegetic. The adult narrator has some overall awareness of her role in creating a metanarrative, as well as consciousness of habitual behaviours which recur in her daily life. The younger narrator

focuses more on specific incidents, rather than general observations. It is incidental that the change to a different narrative level is usually also an instance of analepsis in Jackson's piece. It just so happens that in this text the embedded narrative level involves the same character at a different time in her life.

4.8.6 *Victory Garden*

Victory Garden by Stuart Moulthrop has many different characters and subplots and uses quotation as well, but this thesis argues that this is all told by one narrator, and therefore happens on the same narrative level. The narration is presented in the third person, and it is sometimes focalised by particular characters but usually not as closely as in something like *Twelve Blue*, the language is not as affected by the biases of the characters (with an exception which we will address shortly). The entity that is the narrator zooms in to particular characters, to a certain extent, and at other times zooms out to give us observations on and transcriptions of news reports and quotes from various citizens and political figures about the Gulf War. For example, there are descriptions of television broadcasts such as "Shortly after Zero Hour, Charles Jaco's live report from Riyadh goes buzzing into static just as he's acknowledging that those *are* air raid warnings blowing in the background" (Moulthrop). The narrator here is in a relatively omniscient mode, but is still somewhat providing the experience of people generally watching this broadcast, rather than any one character in particular. An address by George H.W. Bush is described in ironic fashion, with the 'we' being the narrator temporarily speaking for many viewers of the broadcast: "Mr. Bush's address to the nation, 'a 9:01 Hard Start,' as the announcement in the White House press room advises. ...in which we learn that the ruler of Iraq is named SAD-'m Ha-SANE... ...in which we hear that Sad'm has 'systematically raped, pillaged, and tortured' the people of Kuwait, including 'innocent children'... ...in which we are told that 'while the world waited, Sad'm Hasane sought to obtain a nuclear weapon'..." (Moulthrop)(ellipses in original). Another lexia features a quote from a civilian presented with just the quote and an anonymised attribution: "'I'd rather have my husband over there now than have my daughter over there twenty years from now.' - Wife of Airborne trooper, South Carolina" (Moulthrop). Several lexia feature transcriptions of emails from the character Emily Runbird, transcribed in full and presented in Courier font, which contrasts with the Times New

Roman font that is used for all the other lexias.[6] None of these different kinds of lexias are embedded narratives, however; they are still narrated by the same narrator as the rest of the text. The logic for this is the same as for the letters in *The House in Paris*; even though at times we are reading a verbatim transcription, that transcription is still being given to us by some entity. Again, as Rimmon-Kenan states, even when "a narrative text presents passages of pure dialogue, manuscript found in a bottle, or forgotten letters and diaries, there is in addition to the speakers or writers of this discourse a 'higher' narratorial authority responsible for 'quoting' the dialogue or 'transcribing' the written records" (88). In *Victory Garden* there is a narrator, a more definite version of David Hayman's idea of the Arranger in *Ulysses*; an entity is relaying the cacophony of information to us, like a person flipping TV channels. The presence of a guiding force is not least evident in the fact that some of the above examples are presented with irony; the narrator has an agenda when they are quoting. As there is one narrator, it can be stated that all of the various kinds of lexias exist on the same narrative level.

Alice Bell points out one more issue that relates to the character of Emily, in an analysis of one of the more idiosyncratic lexias in the text, entitled "...and...." This lexia describes the moments after the Army base where Emily is working has been struck by a missile. It is focalised by Emily to an increasing extent as the lexia goes on: the language in the lexia is increasingly affected by Emily's consciousness, and it becomes less grammatical. It does, however, seem to consistently refer to Emily in the third person, even at the end she is referred to as 'she,' so she is never fully speaking for herself, the external narrator remains. Bell argues that the narrator is instead changing back and forth as the lexia goes on, between the usual narrator and Emily herself. Bell writes that in this lexia the "last section comprises an eighty-four word sentence with the punctuation gradually deteriorating until it is completely absent. The syntax is particularly confused and lacks grammatical unity" (87). Confusingly, Bell has also stated

[6]We see changes of font being used for various effects in the different texts in this corpus. In *Victory Garden* Courier font is used to denote that the text on-screen is part of an email; Courier font is not used at any other time in this text. The change of font shows a change of the nature of the words; we are reading what a character has typed rather than reading the regular narration that is present in the rest of the text. Similarly, changes of font provide signals that the nature of what is being described is changing in *Seed* and *The Sound and the Fury*. In Walsh's text, italics are used to distinguish paragraphs that are occurring at a different time and on a different narrative level from paragraphs in roman font, with which they are juxtaposed. In Faulkner's novel, italics denote that an anachrony is occurring. This is another instance of Faulkner's text being similar to texts that were written long after it. It uses the physical appearance of the font to convey meaning about the narration, as do these two hypertexts.

that in this lexia "while grammatically the narration belongs to a third-person narrator, the increasing focalisation of the narrative introduces free indirect discourse markers" (87), but, of course, increasing focalisation does not mean that a text is now narrated by the character who acts as the focaliser, and indeed close focalisation is a characteristic of free indirect discourse, which usually maintains the third person narration; they are not mutually exclusive as Bell seems to suggest. Consequently the changing style of narration over the course of "...and..." would seem to be merely a radical extension of the ongoing use of free indirect discourse in this lexia rather than a full transition into stream of consciousness from Emily's perspective. The consistent presence of the third person pronouns, until the penultimate word, seems to disprove the idea that Emily is ever the narrator. I argue that the text becomes increasingly close free indirect discourse but never actually goes into full stream of consciousness narrated by Emily as Bell says that it does. The final two words of the lexia are "me too" (Moulthrop) but what they mean is ambiguous; they could just as easily be spoken by the third-party narrator as by Emily herself. As with the rest of *Victory Garden*, the techniques and prose provide a variety of perspectives, but only one narrator, and so there is no change of narrative level. The text is, however, a brilliant and forward-thinking use of the hypertext medium for storytelling.

4.8.7 *The Jew's Daughter*

Judd Morrisey and Lori Talley's *The Jew's Daughter* is quite different even from the other hypertext fictions in this corpus. To begin with, it is a Flash application that masquerades as a hypertext using the by-then familiar aesthetics of that genre: it features only text, with one word per lexia rendered in blue font, the standard indicator of a hyperlink in the early web. Instead of clicking, however, the user need only hover their mouse over the blue word for a change to take place in the text. Each time this happens, the whole lexia does not change, only part of it. *Voyage Into the Unknown* also uses Flash but it allows the reader much more control and is structured in a much more familiar way for a hypertext fiction; in Coover's text the reader does get to click on icons to see lexia (which in themselves are static, and therefore concrete parts of a narrative), and can do so in any order. In Morrissey and Talley's text the reader is being taken along for a ride; there is only one "link" per lexia and the order is the same every time. One can input any desired page number into a small box at the top of the screen, but this does not alleviate the strangeness of *The Jew's Daughter*, which emanates not just from its form but also its content (although, of course, these two aspects are irrevocably

linked and heighten the effect of one another). Narratively the text is very complex, with indeterminate settings and characters changing frequently, and many passages that read more like poetry than prose. There is at least one narrator. Many parts of the text are narrated in the first person, with frequent references also to a "her" or "she" which appear not so much to be changes to a third-person narration but rather the same "I" simply talking about a different person (or people). Jessica Pressman suggests that the "I" might in fact be many narrators, with the subject of that pronoun changing without warning throughout the text. She writes that there are "many plot twists and narrators, and shifts in dialogue are often not denoted. As a result, it is very hard to know who is speaking, when, and to whom. . . . Since characters are often not named, the pronouns denoting them can change with the shift between screens. As a result, something as simple as identifying the subject of a sentence is often impossible, let alone knowing what is happening to whom at any one point in the work" (108). The text may also have one narrator, as it does rely on that first-person pronoun, but given the lack of names it is difficult to determine this for sure. The partially-changing lexias add to the sense of fragmentation. Structurally, it is still perhaps better to conceptualise the text as one narrative (however opaque) rather than many individual ones; each lexia cannot be considered a standalone narrative because it is too dependent on what has come before. In any case, there does not appear to be any embedding; if indeed there is one narrator, or one entity through whom the whole text is being filtered, then it is all occurring on one narrative level.

4.9 Conclusion

In this chapter we have explored the different kinds of narrative levels, how they function, and how we can discuss those functions. Degree is a useful basic identifier for the depth of a given narrative level relative to the other levels within a text. Extradiegetic, intradiegetic, and metadiegetic are also useful terms for describing the narrator of a narrative level at a particular position or depth in the text. We have discussed that the narrator is the entity telling the story, and that this may or may not be a character. In turn it has been identified that the narratee is not necessarily the reader, and that the focaliser is a perspective closer to the action than the narrator - the point of view through which all is being filtered, on the same diegetic level as the events in the story. Narrative levels can be structured both vertically and horizontally, with different advantages to each, and embedded levels can even occur within dialogue, given certain

conditions which allow a new diegetic level to be established - often reliant in the case of dialogue on the length of a monologue. In general the best indicators of a change in narrative level are a change of either narrator or narratee or both. If one is aware of how to identify those changes, then one is in a good position to recognise narrative level changes and progress to thinking about their effect on the meaning of a text as a whole. We have stated that narrative levels can be used to create ironies, stories that comment on one another, sow confusion in the reader, or maintain verisimilitude while still achieving a broad spectrum of narrative perspectives, but there are certainly numerous other reasons for situating embedded or parallel narratives inside one text. This project's XML schema provides a simple but appropriate way for encoding narrative level changes so that they can be compared to the other narrative phenomena on which this thesis is focused. All of the aspects of narrative levels discussed in this chapter help us to better understand how a text is narrated, and in particular they give us a better grasp on experimental narrative forms. Those things in turn help us to analyse how time is used in fiction, because if we can reliably recognise and encode changes in narrative level, we can more precisely describe changes in the temporal setting of a narrative. When the encoded encoded text is analysed, it shows the extent to which narrative levels are used in the text in the corpus. This chapter has shown that there is value in close reading of narrative levels on its own; Chapter 6 will show how close reading can be enriched by distant reading of that same phenomenon. As will be discussed in that chapter, showing where level changes happen in a text, and how much of a text's words take place in different narrative levels, leads one to close readings of why those changes occur, and how they serve to further fragment the narrative. In this corpus they are not present in all the texts: they occur in *Seed*, *my body - a Wunderkammer*, *Voyage into the Unknown*, *Twelve Blue*, and *Tender is the Night*. It is essential to encode level changes because they often co-occur with anachronies. While the texts from both genres in this corpus use anachrony in similar ways on a sentence-to-sentence level, the hypertexts measurably use more narrative level changes and more words inside different narrative levels. This may suggest that those hypertexts are more narratively fragmented than their modernist counterparts, as the greater frequency of analepsis tags also seemed initially to suggest, but as we will see, there are greater similarities between the texts from the two genres, and their shared commitment to representing subjective experiences of time by spending similar proportions of their word counts inside analepsis indicates that these texts are more similar than they may initially appear. This is made more visible by the results of the encoding and analysis. We now turn our attention to

how the encoding and analysis was developed and enacted.

Chapter 5

Winding the Watch: Methodology

5.1 Introduction

The previous chapters have shown that fruitful analysis can be done on narrative time in modernist and hypertext fiction using relatively traditional literary theory. It has been shown that efforts to achieve particular, subjective representations of time have been significant influences on how modernist and hypertext narratives are structured. The need to represent time in a new way was in turn influenced by evolving philosophies of time. The preceding chapters have also shown that there are valid comparisons to be made between modernist and hypertext fiction in their narrative strategies. However, in order to more precisely compare the uses of anachrony, subjective narration, and narrative levels between modernist novels and hypertext fictions, quantitative measures become necessary. This is due to this study's focus on time in narration. If one is comparing transitions in narrative time, then in order to get a clear picture of what is going on, one must determine to what extent those things are happening, to what degree and with what frequency. This is what my annotation system allows; it shows not only *that* a particular technique is being used, but how much it is happening, in terms of how many words per page, chapter, or total word count of a text are being devoted to specific narrative techniques. This annotation system can show where, for example, an analepsis begins and ends, but also how long that analepsis is relative to the page or pages in which it is contained or over which it spans. We can also see how many instances of analepsis are happening relative to the same parameters of pages, chapters, whole texts, and word counts. Quantifying how much and how often a narrative technique is used allows one to see the peaks and troughs of

the usage of that technique over the span of a text. On a smaller scale, we can see how much a text disrupts chronological time on the sentence-to-sentence level, within pages and lexias. We can see whether hypertext fictions are using these experimental narrative disruptions more or less than modernist texts relative to their total word counts, and more or less frequently. This in turn will allow us to theorise whether the comparison between the two genres is borne out structurally, whether evolving attitudes to time have impacted narration in experimental fiction, and whether there has been a measurable influence of modernism on hypertext fiction. These measurements of how much and how frequently narrative disruptions are happening is necessary to better understand how time is narrated varyingly between these two genres. Specifically, the encoding and analysis provides results that lead us to close readings of the texts. The distant reading shows that the texts from the two genres spend similar proportions of their word counts in analepsis, while closer analysis of those instances of analepsis reveal a similar commitment to representing subjective experiences of time, as the narrative disruptions caused by anachronies evoke the experience of simultaneity. This chapter shows how the methodology was developed and put into practice so that those results could be achieved.

Counting and determining the frequency of narrative characteristics related to time reveals information about the structure of novels and of the tree-and-branch structure of hypertext fictions. On a lower structural level, this kind of analysis can reveal how the narrative characteristics in question form parts of the constructions of pages, lexias, paragraphs, and chapters. Analysing word counts[1] and smaller units such as pages (or lexias) and paragraphs is a useful way to compare texts that are otherwise quite different in their overall structure. Both modernist novels and hypertext fictions can be fragmented narratively; counting the number of instances and degree of usage of narrative disruptions can tell us how much these texts are fragmented, relative to each other, and to fiction from other genres and time periods. Finally, the field of narratology emanated from structuralism. Narratologists are concerned with breaking down narratives into their constituent parts to discover and show how they function. This project has the same aim, and uses the technology now available to break down narratives in terms of their treatment of time and compare them against one another.

[1]Obtaining word counts for entire texts is simple; a text editor such as Atom will show the number of words in a whole document. For this thesis, obtaining the word counts within tags, pages, and lexias was done manually, by highlighting the contents of each tag and noting the number of words within that highlighted section as counted by the text editor. Each of those numbers was transcribed into Excel files where they were collated, compared, and used to make the graphs and tables in Chapter 6.

In order to do the kind of quantitative analysis of narrative features that is required, XML is the ideal tool for this project. The extensible markup language is useful for this project because of its versatility while maintaining simplicity, and its familiarity both to myself and to others. XML allows me to create simple tags to address the aspects of narrative with which I am concerned and which have not been addressed in the same way by previous, similar annotation systems (which this chapter will discuss in greater detail shortly). These tags, while simple in themselves, can have attributes, so one tag can be used to annotate multiple versions of a narrative technique, and the tags can be nested inside one another to clearly represent complex narrative phenomena. XML is widely used, so while I can adjust it to annotate the features with which this study is specifically concerned, the schema will still be relatively similar to annotation systems made by others to address similar phenomena. Other XML users can quickly see how my tags are used and how my schema is structured, which increases its potential future usability. More detail will follow later in this chapter on how the XML system works, with examples from the annotated corpus of this project.

This chapter will also answer in greater detail why it has been necessary to use quantitative analysis and XML, and will show how the project's methodology was developed and implemented. It will first discuss related work in both automatic and manual annotation of narrative features; then discuss XML; then explain the methodology and its inspirations; then explicate the schema, its development and how it is used in practice; and finally describe the experiment in practice how the quantitative measures are implemented, and also the influence of the collaborative SANTA project on all of this.

5.2 Related work

The work of narratologists, computer scientists, and digital humanities scholars on manual and automatic annotation of narrative features has been inspirational to this project, and has also shown that there is a knowledge gap, which this thesis addresses. NarrativeML and ProppML are early points of reference for this project. NarrativeML is an annotation scheme written in XML which is intended for encoding the goals of characters and narrators, aspects of pacing in narrative, and embedded narratives (Mani). It is concerned with narrative time to an extent, but this is not its primary focus. The tagset of NarrativeML is small in terms of its number of elements, but the amount of attributes and values that can be added to those elements

allows the system to be used to annotate quite a number of narrative features. This breadth of available options makes NarrativeML very good for what it is intended to be used for, just not so useful for the specific goals of my project in addressing narrative time, subjective narration and changes in level, both together and separately, in a relatively simple and easy to read (and easy to encode) way. NarrativeML is similar to the annotation system that I have made in that it is so high-level, in terms of the narrative concepts it addresses, that at present it would not be possible for a computer program to use it for automatic annotation. The difference is that NarrativeML is much more detailed in its selection of attributes and values, which allows for annotation of somewhat complicated features of the narrative (like the nature of the narrator in several respects, and whether the characters are real in the storyworld or not), but the disadvantage of this is that a completed NarrativeML XML file is quite complicated. When NarrativeML is used, most of the words in a narrative text end up being encoded, each with their own element, and often with several attributes and values (some of which are just ID numbers or codes) for each element. This makes a fully encoded text quite difficult and time-consuming for a user to read. The level of detail in the annotation also makes texts difficult and time-consuming for an annotator to encode. There are, of course, advantages to this kind of detailed XML encoding: it makes the text very good for computer searching because there is so much information in the elements, and so many unique identifiers. It is, however, unsuitable for my project because it is too complicated and would take too much time to use to annotate a corpus as large as mine,[2] while it also does not specifically address the narrative concepts in which I am interested in the way that I need.

NarrativeML features 'ANALEPSIS' and 'PROLEPSIS' as values for the 'order' attribute in the Narrator element. This aligns with the system's focus on the identity and function of the narrator, and allows it to address the order in which a story is told. However, the Narrator element, and thus its values, can only be applied to one word at a time, usually either a pronoun or name which identifies the narrator. This system does not allow for the element to envelop a span of text, so the number of words encompassed by an instance of anachrony cannot be determined. NarrativeML has a Time tag, but this is used for annotating direct references to time, like dates or spans of time like "one more day" (Mani 25), and also the duration of a plot event. In addition the Time tag can be used to annotate story time (which is estimated by the

[2] *Large* is a relative term, of course, and my corpus is quite small compared to those used in automatic annotation or natural language processing projects.

annotator) versus discourse time, or reading time (which Mani measures at a rate of 300 words per minute (57)). The Time tag does not address anachrony at all.

The system has a way of encoding free-indirect-discourse narration, but not stream of consciousness. As with anachrony, free indirect discourse is encoded as part of the Narrator element. 'FREE_INDIRECT' is one of the values which can be selected for the 'distance' attribute of Narrator. The other values are 'NARRATED,' 'INDIRECT,' 'REPORTED,' 'DIRECT,' and 'IMMEDIATE,' which gives a basic but serviceable range of classifications for describing how the story is being told.

NarrativeML does allow narrative levels to be encoded with a simple iterative system whereby 'LEVEL' is used as an attribute of the 'Narrative' element, and the value of the 'LEVEL' attribute can be whichever integer corresponds to the current level of the narrative in question. So, LEVEL="1" would denote the highest narrative level, LEVEL="2" would be embedded inside that, and so on. Using this method, the span of words spent in each narrative level is not specifically noted, but is self-evident by the introduction (or absence of) a tag marking the beginning of a new level. As with the Narrator element, the Narrative element is only applied to one word at a time, so it is not possible to specifically mark the beginning and end point of a narrative level using one tag to encompass all its words. In addition, if one were annotating a change of narrative level using NarrativeML, the span of text in the XML file between each Narrative tag with a LEVEL attribute would mostly consist of XML tags, their attributes, and their values, as there is far more of this data than words from the original text in a fully encoded NarrativeML XML file. As a result, if one wanted to determine the number of words in the original fiction text contained within a particular narrative level, one would have to first find the next Narrative tag that marks a level change, and then filter out all the XML information in between, leaving only the original words to count; this process is more complicated than this project requires. For the aims of this project, my annotation system is more useful, even though it is very similar in terms of how it denotes the iterations of narrative levels, because the Level tag can encompass each level as a whole, rather than just one word. This allows one to see more easily where each level begins and ends, because there is a relation between the opening and closing tags of the Level element. There is also far less noise in between those two tags, allowing for quickly determinable and accurate word counts.

In summary NarrativeML is interesting but cannot do exactly what I need in terms of simply

and cleanly annotating the specific narrative features on which my research is focused. It is too large, detailed, and time-consuming for annotation of my corpus, and is missing key features that I need. For my aims of comparing patterns in narrative time features across literary genres and time periods, I require a system that is simpler and faster for manual annotation, with interlockable tags to show the relations between anachronies, subjective narration, and narrative levels. Finally, NarrativeML is notable in that it incorporates elements from TimeML, another system, which is focused primarily on narrative time, and which can be used in automatic annotation. We will turn our full attention to TimeML shortly, but first it is necessary to discuss ProppML, as, like NarrativeML, it is used for manual encoding.

ProppML is less applicable to the narrative features on which my project focuses than NarrativeML, but it is useful as another example of a system for manually encoding some narrative features in fiction (Yarlott and Finlayson). It is also made for XML, but is distinguished by the fact that it focuses on the basic elements of Proppian folktale morphology. This is the Russian formalist Vladimir Propp's classification system for breaking down a story into elements of plot such as departure, struggle, and mediation, and character archetypes such as hero, villain, and princess. Of course, this is intended for simple stories with formulaic plots. It is not intended for modernist novels and hypertexts, to which these kinds of categorisations would not be readily applicable.

ProppML focuses on events in the plots of stories. As such its main tag is the Function tag, which corresponds to Propp's terminology for categorising the movements of a plot. A function is essentially anything happening in the plot. The main option that ProppML has for annotating narrative time movement is using the terms subsequent and antecedent as values within the function tag. An XML file fully encoded with ProppML appears to be less human-readable than NarrativeML, which as we have noted was already quite difficult for a human to read. ProppML uses even more short codes and ID numbers in its tags. Yarlott and Finlayson highlight the level of detail they have employed when they say that "each annotation has three XML attributes: a unique id number (id), an offset (off), and a length (len). The id number is unique among all the annotations in the document. The offset refers to the starting character in the characters of the text to which the annotation applies; the length attribute refers to the length of the annotation, in characters." (15) As with NarrativeML, but to an even greater extent, this level of detail is not necessary for the aims of my project and would be a hindrance to the encoding process.

TimeML has more in common with this project, in that narrative time is its primary focus. TimeML is notable in that tools exist which can apply it automatically. TimeML's key tags are the Event element and the Timex3 element. In the annotation guidelines (version 1.2.1) produced in 2006, Saurí et al. describe an *event* as "a cover term for situations that happen or occur" (2). These events can be "punctual" or they can "last for a period of time" (2). Saurí et al. "also consider as events those predicates describing states or circumstances in which something obtains or holds true" (2). In effect this usually tends to be the verb in each sentence. The Timex3 element is used to annotate references to specific points in time, such as 'a year ago,' 'tomorrow,' a particular calendar date, or any reference to a measurement of time, such as 'months.'

The Timex3 and Tlink tags allow numbers to be assigned in their values for recording the relative order of events, but that is all that the system offers in terms of annotating sequence or order. There are no tags for analepsis or prolepsis, and, of course, the annotation scheme is not concerned with subjective narration or narrative levels so there are no tags for them either. As a result, TimeML is a good reference point as an annotation scheme (which is made not just for fiction) which is focused on the ways in which time can be narrated. It is just not useful for the aims of my project. TimeML cannot combine annotations of those aspects of narrative time with annotations of narrative levels and subjective narration, but the relation of these things to each other makes it necessary to annotate them together.

A significant aspect of TimeML, however, is the fact that tools have been developed to automatically annotate texts with it. The TARSQI toolkit is the principal example of this. TARSQI is a natural language processing pipeline which takes plain text as its input, detects events from the verb usage in the text, recognises time expressions such as dates and references to units of time (and does many other things), and outputs the original text encoded in TimeML (Verhagen and Pustejovsky). This program was explored in the early stages of this project, but because TimeML generally is not usable for the goals of this project, neither is TARSQI. At a later date TARSQI may be useful for comparing automatically-encoded output of the fiction texts from my corpus against my manually encoded versions of the same texts, particularly in relation to tenses (especially to determine how much of a correlation there is between my manually encoded instances of analepsis and automatically detected usages of the past perfect tense), events and time expressions. For now, however, none of the tools so far described address the main goals of this project.

In addition to these annotation schemes dedicated to applying narrative theory, it is worth briefly mentioning that there are some elements and attributes in TEI which can be used to annotate some basic narrative features, but this is more a testament to the versatility of TEI that this can be done at all. TEI is an encoding scheme based in XML. It is designed for presenting a wide variety of documents online, usually in an academic or research context, and mostly in the humanities and social sciences. It is not made solely for annotating narrative features. The methods that it allows for annotating narrative features are not useful for the purposes of this project.

5.2.1 Recent related work

There have been recent developments in relation to the annotation and graphical representation of narrative features, some of which relate to time, and to narrative levels. In October 2019 Hannah Schwan et al. published a paper outlining a visualisation tool called Narrelations. This tool is an interface focused on "the visual analysis of specific narrative phenomena: the nesting and distribution of narrative levels and their correlations with certain temporal phenomena" (Schwan et al. 1). Essentially their team has made a way of representing annotated narratives as a diagram consisting of concentric rings. The rings are highlighted at different points along their circumferences to show which narrative level a part of a story is taking place at, with the circumference of the ring representing the length of the story as a whole. The innermost main ring is the first narrative level, while each ring outside of that respectively counts as the second or third narrative level, and so on. As such one can quickly see at what points, relative to the overall length of a story, the narrative changes to a different level, and roughly how long it stays there for. There is no numerical word count showing how long a story stays in a narrative level; however, the corresponding story is displayed beside the visualisation, and when one clicks on a part of the ring, the corresponding section of text is highlighted beside it. Colour-coding is used on the narrative level visualisations to denote which narrator is speaking. In addition, the diagrams show analepsis and prolepsis, but in a way that does not convey much information. For this function, an optional extra ring appears inside the previously innermost ring, which simply shows whether analepsis or prolepsis is happening. This ring is all grey, in contrast to the bright colours of the other rings. Analepses and prolepses are distinguished from one another by the direction in which the graphical bars emanate from the ring; "rectangles pointing outwards indicate prolepses ("flashes forward"), rectangles pointing inwards the analepses

("flashes backward"). Akin to the embedded narrations, the length of the rectangles are to scale to the length of the respective text segments. By visualizing this phenomenon on another circle line, the connections and correlations between the analepses/prolepses and the embedded narrations can be viewed at a glance." (Schwan et al. 35-6) The height of the bars does not represent anything. The diagram shows at what point in the text relative to its overall length these anachronies are happening, and how long they last (again, just in relative terms), but does not show the extent to which it is happening - how many words per page (or other unit) are being encompassed within those anachronies. In most ways the design of Narrelations is excellent. Schwan et al. state that they settled on the circular form because it "could support the examination of narrative levels in combination with temporal aspects" (29). They explain "since the initial sketches, we explored the viability of a circular representation of the entire text to provide a compact overview of the different narration levels and related phenomena . . . This visual structure has repeatedly led to approval and agreement from the literary scholars in our team, in particular due to the ability to display and examine complex temporal phenomena of a story in correspondence with the embedded narrations" (Schwan et al. 34).

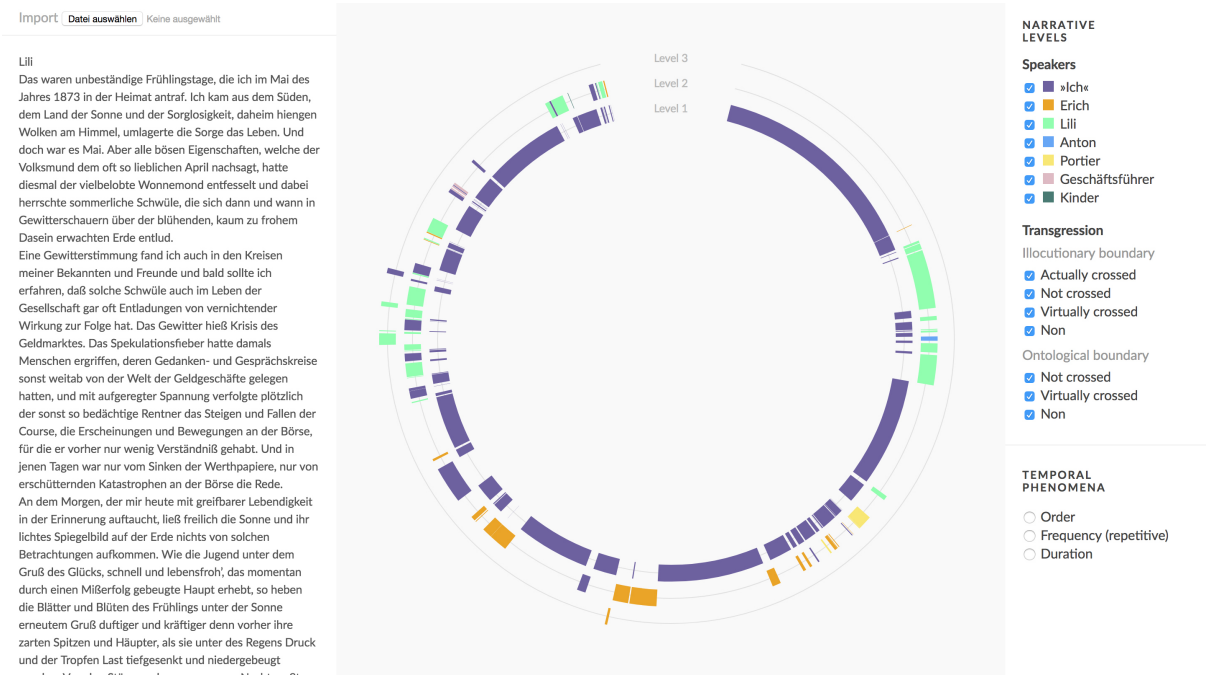

Figure 5.1: This image provides an overview of how the Narrelations tool shows the relationship between narrative levels (Schwan et al. 1).

Narrelations is excellent for showing, in a clean and easily readable design, how many narrative levels a story has, and the rough proportion of story length spent in each level. It is, however, slightly too limited for the purposes of my project (in addition to the fact that the paper

introducing it was published during the final stages of my PhD, when, of course, the direction of the project had long since been decided). Narrelations shows whether narrative level changes and anachronies are happening, but cannot show the degree to which they are happening - how many words are being encompassed by these techniques per page, chapter, or section. It cannot show relative peaks or troughs in the usage of those techniques over the course of a text, only binary information on whether they are happening or not. While Narrelations allows representation of which narrator is speaking, it does not account for stream of consciousness or free indirect discourse, which is a different question. Furthermore it does not display word or character counts, leaving it inexact and best used as a rough guide to lead one back to the text. This is an excellent tool, but for comparing different fictions of different lengths and structures, quantitative information on word counts is required.

The ability to show comparisons of how much a technique is being used at particular points in the text relative to other points in the text is key for determining whether there are structural similarities across texts and how those can be explained. In the case of hypertexts it is important to compare words per lexia, and to find particular lexias that are either representative of the norm or anomalous. In order to fully understand the nature of the narration in hypertexts, it is important to determine what causes the lexias with more words contained in narrative feature tags than the average to be this way. Focusing on word counts in small units rather than a whole piece of fiction allows hypertexts to be compared to novels because it negates the effect of their structural difference. In this way we can see whether the usage of experimental narrative techniques within hypertext fictions is similar or different to the modernist novels in the corpus, a well as to other hypertexts. Furthermore, there is a need to show how frequently the narrative techniques in question are being used, in all the texts in the corpus. The ability to show how many analepsis tags (for example) are being used and how many words there are, on average, between each new tag shows us areas of increased frequency that can lead to investigation of why that is happening at those points in the text. Narrelations cannot do this.

Narrelations also does not account for narration that is affected in its style by the subjectivity of the focaliser, which is a key part of my annotation system because my work deals with the idea of texts that aim to represent a subjective experience of time (inspired by changing ideas in the philosophy and science of time around the turn of the twentieth century), so if one is annotating temporal disruptions, then one must also annotate stream-of-consciousness and free-indirect-discourse narration to help to show why those disruptions might be happening, and how much

they are affected by the subjective experience of the focaliser. Related to this, the other way that my work fills a knowledge gap is that Schwan et al. don't engage with the philosophy of time or its influence on fiction, whereas an important part of my research is positing that evolving ideas of time influenced the temporal narrative techniques of modernist fiction which in turn influenced hypertext fiction. Schwan et al. are focused on narrative levels primarily, with time as the secondary focus.

Overall Narrelations is the most effective way I have yet seen for showing narrative level changes in a text, and its attempt to combine this with considerations of temporal disruptions is impressive, but it is not perfect. But Schwan et al. are focused on interactive visualisation and interface design which supports arguments about narrative levels, with time as a secondary focus. Narrative time is my first focus, and visualisations are not; for my project they are more of a rudimentary way to show the data and its potential, and to lead me back to close literary analysis of the text.

5.3 Why XML for this project

The combination of XML's adaptability, simplicity, and familiarity - both to me and to others - made it the perfect choice for my project. In order to compare narrative features in a structured way across different texts, it was necessary to count how much and how frequently those features were occurring. Annotating each occurrence of those features was the way to do this. Annotated text is quantifiable, searchable, and structured. In addition, while some of the narratological concepts on which this project focuses had been used in annotation systems before, not all of them had been, and this specific combination of concepts had not been done in an annotation system. This combination of tags is necessary is order to account for the combination of experimental narrative techniques which this thesis contends are related to each other. So, a new annotation system was required. As has been mentioned in the introduction to this chapter, the annotation system had to be one that would be applied manually, because while natural language processing is very good at detecting linguistic features like tenses of verbs, and identifying specific references to units of time (when the program has been given a list of such terms and date formats), but it is not (yet) able to identify high-level concepts such

as anachronies, narrative level changes,[3] or subjective narration. If manual annotation is to be done, then it should be with XML for several reasons. The fact that XML allows me to make my own annotation scheme with my own tags while working within existing structural rules is highly advantageous. XML literally provides a language within which I know that I can create a ⟨soc⟩ tag for stream of consciousness and give it a PERS attribute whose value can be any string, for assigning a character's name to the span of stream-of-consciousness narration that is from that character's perspective. Similarly XML's structure allows me to create a ⟨level⟩ tag and assign it a DEGREE attribute whose value can be any integer, for annotating different narrative levels using Genette's terminology of first-degree, second-degree, and so on. Another advantage of XML is that it is extensible; I can change the names and other content of the tags easily if necessary. The same basic structure that allowed the creation of the tags allows them to be changed, because one knows one will still be working within that same structure, so the whole method of annotating does not have to be changed, and - crucially - text that is already annotated does not have to be redone; the content of the tags themselves would be the only thing that would have to be changed, and this is easily done using search and replace. XML also has the not-inconsiderable virtue that I and many other people are already familiar with it. This means that there was no barrier to entry for me, and that it will be easy for other people to read the annotation scheme and text that has been encoded using it and understand both of those things, and it will also be easy for them to use the system themselves. Finally, the powerful XPath search query function can be used on XML-encoded text, which provides a lot of future options for finding specific usages of tags, determining how often certain tags are used, and more.

5.4 Obtaining the text of the corpus

The actual plain text of the fictions in the corpus, the raw material to be encoded, had to be obtained in several different ways. Clean digital copies of the modernist novels were generally easy to find. The text of *To the Lighthouse*, *Pointed Roofs*, *Tender is the Night*, and *Three Lives* was copied and pasted from Project Gutenberg directly into my XML files, excluding the header and footer information from Project Gutenberg. The text of *The Sound and the*

[3] Eisenberg and Finlayson's NLP work is perhaps closest at being able to detect narrative levels automatically; their program can at least identify whether a narrative is taking place (Eisenberg and Finlayson).

Fury was copied and pasted from *The Sound and the Fury: A Hypertext Edition* edited by R.P. Stoicheff et al. *The House in Paris* was not available on Project Gutenberg, so I downloaded an epub copy of the novel, converted it to a txt file using Calibre, and pasted that text into an XML file, excising front and end matter and the table of contents. The text of the Gutenberg version of *To the Lighthouse* is that of the American edition of the novel; it has some differences from the UK edition. This version of the text was selected because it was readily available online. For some of the hypertext fictions, the text could be copied and pasted from their online sources into XML files. This was the case with *Uncle Roger*, *Twelve Blue*, and *my body - a Wunderkammer*. The text of the four other hypertext fictions could not be copied. Instead, I used the optical-character-recognition (OCR) software Capture2Text to read a piece of what was displaying on my computer screen and output plain text. This was repeated for every page of *The Jew's Daughter*, *Voyage into the Unknown*, *Seed*, and *Victory Garden*. The output also had to be checked for mistakes and corrected. *Victory Garden* presented further challenges as it was the only hypertext that was not available to read online. For PC, it was only available on a CD-ROM which would only run on older versions of Windows. To read *Victory Garden* I installed a virtual machine running Windows 7, and opened the CD-ROM using that operating system. To OCR the text, I ran Capture2Text on my usual operating system, Windows 10, and captured the contents of the screen on the virtual machine, which was simultaneously open on my desktop. Through this process I was able to obtain the text of *Victory Garden* and make it ready for encoding in XML, along with the rest of the corpus.

5.5 Methodology Part I

The methodology of this project is essentially one of annotation and quantification inspired by structuralism and text-mining. The workflow of this comprises manual annotation of the corpus, recording of data of where, how much, how frequently, and in what combinations narrative techniques related to time occur in the text, using the tags to achieve this, reading that data both in its raw form and as graphs of the tags' usage over spans of text, looking for patterns, clusters, similarities and differences between texts, notable increases or decreases of tag frequency between texts and more importantly between the two genres. Then, those results inform re-reading of those points in the text where notable phenomena are occurring, in order to determine how and why, in narratological terms - or, in other words, in more traditional literary

close-reading analysis - these temporal disruptions are happening. This return to close analysis of the texts themselves is informed by research on narrative in modernism and hypertext fiction, how time is represented in narrative, and the philosophy of time's influence on fiction, all of which has been done simultaneously with the rest of the project. The reason for this methodology is to allow structured comparisons, supported by data, of the usage of narrative time features in different kinds of fiction, and also simply to create and allow for combinations of tags that have not been done before in narrative annotation systems, based on the way that they have been shown to relate to each other in theory. Much as the project investigates different genres and combines concepts from narratology with XML annotation and quantitative comparisons of texts, the methodology draws from a combination of several inspirations.

5.5.1 Inspirations for methodology

The inspiration for taking specific concepts from narratology and translating them into XML comes from the annotation systems detailed in section 5.2 of this chapter. NarrativeML, ProppML, and TimeML all showed that concepts could be taken from narrative theory and incorporated into XML systems that made sense - the work of moving from structuralist ideas (no less than the Russian formalist Propp) to structured annotation had been done. They had shown that this could be done with fiction (as, of course, narratology does not only apply to fiction). What hadn't been done was the specific combination that my system adds, or indeed the specific comparison of annotated works from modernism and hypertext.

The broader idea of comparing works and groups of works quantitatively comes from digital humanities projects that engage in the text-mining of fiction. These show that there is value in treating literary works as sources of data which can be compared at scale. In particular, the work of Stephen Ramsay, Matthew Jockers, and Tanya Clement has been influential, as they combine their quantitative work with close readings of the primary texts. Ramsay compared sections of *The Waves* by Virginia Woolf against each other, noting the difference in the vocabulary used in sections narrated by the different characters, and what that can tell us about those characters (Ramsay 12-14). Jockers has shown how to visually represent the relative similarities and differences in prose style of a corpus of nineteenth- and twentieth-century novels using cluster dendrograms (117). Clement uses visualisations of the frequency of usage of the word "one" increasing dramatically in the second half of Gertrude Stein's *The Making of Americans*, just as

the usage of the word "I" becomes far less frequent (Clement 437). Using this graph Clement is able to convincingly argue for a definite and deliberate structural change in the second half of the novel, driven by its syntax. This latter example also shows how quantitative measures can help to interrogate the structure of fiction texts, as well as the style of their prose. Additionally, projects like Katherine Hayles's analysis of *Tree of Codes* by Jonathan Safran Foer show how distant and close reading can be combined to produce new insights on a text. As Foer's text is a drastically edited version of an earlier text by Bruno Schulz, Hayles shows with statistics exactly how many words have been excised from the original to create the new text. The article shows that some words that occur several times in the original are not used at all in Foer's text, creating different thematic meanings. Schulz's text uses animalistic descriptions of one of the characters, the father. Hayles notes that "'Wings,' 'feathers,' and 'cockroaches' are among the words missing in Foer" and suggests that the result of this is that by "erasing the references to animality, Foer brings to the fore the oedipal conflict that in Schulz is a subtext" (228-9). This is another example of how quantitative analysis of the prose style in a text provides fruitful qualitative readings of the of that text. Martin Paul Eve's book *Close Reading with Computers* also combines close and distant reading, and reflects on the nature of that combination, suggesting that quantitative methods are very useful for close reading, that they are more useful as a microscope than a telescope (4). Of course a progenitor of distant reading was Franco Moretti, although his key early readings, such as the character network analysis of Hamlet, were done by hand and not computationally, so they did not influence this project. This project is instead influenced by a closer integration of data with the ultimate readings of the texts, and that is present in the other examples mentioned here.

Style often informs structure. My project engages with style through its engagement with the usage of experimental narrative features on the sentence level, and with the way those features make up the larger structure of the texts.[4] Both the Jockers and Clement examples show that creating visualisations from data gleaned from literary texts can lead to useful insights about those texts. Work like this informs my project's use of graphs showing where and how frequently the narrative characteristics that I have encoded occur in the texts from the corpus. These graphs provide an otherwise-inaccessible perspective on the patterns of narrative techniques in

[4]Also in terms of style, there is potential scope for detecting the tenses of verbs used in texts from my corpus and comparing the automatically-annotated usages of the past perfect tense with my manually-annotated detections of analepsis, but that is not within the scope of this current project.

and across texts, allowing for attention on specific passages and sections, and comparisons of overall structures that can then lead one back to close readings of the original texts to determine why those patterns are happening. There is an obvious difference between the above examples which use text-mining and my own work which is manual, but they both output data, and the methods undertaken using that data are comparable, as are the resultant kinds of insights gained from that data. Text-mining is limited by the capability of current computer programs, so for my project, which necessarily involves greater narratological nuance, manual annotation has to be used instead. Text-mining and the methods associated with it have been an inspiration in showing that literary arguments can be made well using data to support them, that distant reading can be used to inspire and support close reading. My project had to involve manual annotation before utilising the elements of text-mining methodology which were transferable: the analysis of quantitative information, graphing that data, and returning to the text.

The other annotation systems mentioned have been an influence, but rather than encoding individual words at a time, as they do, it was necessary for my project to encode spans of text in order to capture the length of narrative features, and, crucially, in order to allow the tags to be nested inside one another to enable annotation of narrative features working in conjunction with each other, and beginning and ending at different points. The influence for the facility to encode (sometimes quite long) spans of text came from my prior experience of using TEI, which is regularly used to encode spans of text, for instance with manuscripts where the tags for divisions, paragraphs, addresses, etc. become useful.

The recording of the amounts of tags, and thus the narratological concepts that they represent, has a combination of inspirations, rather than one direct predecessor. The studies discussed in this section count certain words but not the tags used to encode them (although, of course, word counts of sections, and how they relate to numbers of tags, are also key to this project), but from those word counts the studies can make overarching statements about the texts in which those words are contained. Meanwhile there is a more general influence of structuralism, of the idea that text can be broken down into its constituent parts. If text-mining projects can count statistical features of prose style, and structuralism can break a text down into the narrative units which coalesce into the whole of a story, then a project that combines digital humanities and narratology should engage in the counting of those constitutive narrative elements.

5.6 Methodology Part II: The XML schema

5.6.1 The development and refining of the schema

It has been established that XML was the best choice for this project's annotation system; once that was decided, the creation of the system itself became about enabling the annotator to capture the narrative features on which this project is focused in as accurate and efficient a manner as possible. Thus, the tagset would be limited relative to systems such as NarrativeML, but the way those tags could be used and combined would be flexible. Essentially any of the tags in this system can be nested inside any other tag. The system in its final version has six tags, with some further attributes which can be applied, and they represent the narrative functions of anachrony, changes in narrative level, and two basic categories of subjective narration.

The XML schema - the document which describes the annotation system - has gone through several iterations as it has been refined to best serve the needs of the project (Kearns). Over the course of that process some tags have been added, and some tags that were initially part of the schema have been removed. From the beginning, the schema had a focus on the narrative jumping backwards and forwards in time, although I had not settled on using the formal terms from Genette of analepsis and prolepsis. Soon, given how widely those terms are known and used in narratology, and given how perfectly they describe the concept I was addressing, they were incorporated into the schema as the best (and most obvious) way of encoding temporal disruptions in the narrative. They became, quite simply, the analepsis and prolepsis tags. Meanwhile, the SOC and FID tags, for stream of consciousness and free indirect discourse respectively, have remained unchanged since the first iteration of the document. One concept that was present in early versions of the schema but ultimately was removed was the attempt to annotate story time as being either extended or compressed, relative to the time of reading. This is inspired by Genette's ideas about the difference between story time and discourse time. Initially this was translated into XML as one storyTime element, with various attributes for denoting whether the story time was extended or compressed. Later, for simplicity, and ease of encoding, this was switched to two separate XML elements, extendedTime and compressedTime. Ultimately, Genette's concepts of story time and discourse time were not a focus of this overall project, so there was no longer a use for these tags. They would have only slowed down the annotator, without adding anything vital to the theoretical concerns of the project. Also,

stating that story time is moving slower or faster than discourse time means that one would have to have a reliable rubric for determining discourse time. As has been mentioned, reading speed varies from person to person, so even if one uses a conservative estimate of 300 words per minute (Mani 57), this is still only an average and cannot apply to everyone, which is not satisfying.

Another tag that was part of early versions of the schema but eventually discarded was an element for Narrator with attributes that described whether the narrator's position was extradiegetic, intradiegetic, or metadiegetic, following again Genette's terminology for the narrators of embedded narratives. This tag was deleted for the same reason as the tags dealing with story time versus discourse time; interrogating the role and position of the narrator was not part of the primary focus of the project, it was too far removed from the focus on narrative time. These categories of narrator have been discussed at length in Chapter 4, and they are very useful, along with other strategies for conceptualising and categorising the narrator, for determining whether a change of narrator has occurred and thus a change in narrative level. However, there is already a tag for annotating changes in narrative level, so the narrator tag, for this project, is not useful on its own. The final system provides enough relevant information about the narrator using the SOC and FID tags - the vital relation here being the fact that using these tags helps to determine why anachronies might be happening, because we can see to what extent they are incorporated into subjective narration, so we can ask whether this experimental representation of time is part of an overall effort to faithfully represent life and time as perceived by the characters in the story.

Other tags were always present in some form but were refined to make more sense in XML. Genette's practice of referring to successively embedded narrative levels as first-degree, second-degree, third-degree narrative levels, and so on, was always the inspiration for how narrative levels would be encoded in this system, partly because it is a simple iterative system with the first degree narrative level as the topmost or frame narrative, and every other level embedded within or below that. The schema's older way of encoding this was quite literal, with separate tags for firstDegree, secondDegree, and thirdDegree. The problem with that was deciding how many of these tags were necessary; while stories that use narrative levels rarely go beyond a third-degree narrative, in theory there could be any number of embedded narratives. A tag for embedded narratives has to more flexibly account for any use that it could possibly have. So, instead of having separate elements for each narrative level, one tag was created which

could allow for that flexibility in its attributes and values. There is now one Level tag, which has DEGREE as an attribute, and the values of that attribute can be any integer (or, if one chooses, no attribute needs to be applied). A first-degree narrative level is annotated as ⟨level DEGREE="1"⟩, a second-degree narrative level is ⟨level DEGREE="2"⟩, and so on. This system can accommodate any number of narrative levels, and is a better use of the capabilities of XML.

5.6.2 The schema elements and their functions

The elements from the final version of the schema are as follows:

- **Text**
- **Level**
- **Analepsis**
- **Prolepsis**
- **SOC**
- **FID**

The XML version of the schema can be found in its entirety in the appendix.

Each tag can be used on its own, with nothing else nested inside it, and nested inside nothing else. Or, Analepsis and Prolepsis can be nested inside Level, SOC, and FID, and SOC and FID can in turn be nested inside Level.

Due to the modular structure of this system, the annotation routine does not have to follow a particular order; an annotator does not have to check for the presence of one phenomenon before looking for another. Not every tag needs to be used in one piece of fiction. The tags can be applied as necessary depending on the fiction text being encoded.

The following are descriptions of how each of the elements are used, with examples.

Text

This element is a container for the rest of the encoded XML document. It is only opened at the beginning of the document, before any other elements, and then closed at the very end.

The purpose of this tag is to allow XML documents encoded with the schema to be valid, and to act as a frame within which all the other tags, and plain text, can be placed.

Once the text element is used, while any other element from the schema can then be used, there is no obligation to do this, as plain text will now be valid, due to the fact that ⟨text⟩ is a complex type element with the mixed="true" attribute enabled. All other elements in which other elements can be nested also have this attribute.

Level

We can see an appropriate usage of the Level tag in the example below, from *Tender is the Night*. The character Franz signals to Dick that he is about to tell a story. We are then presented with that story, in its own chapter. We know that this story is being told in dialogue but it is not presented as such. It is told by the same narrator as the rest of the novel. However, we know that Franz is telling the story to Dick. So, in a sense, the narratee has doubled to be not just the reader but also Dick. The focaliser has also changed from Dick to Dohmler, the character who was present for the events of the story and who told them to Franz. Dohmler's story is an entirely self-contained, intact, embedded narrative. At its beginning, immediately before the first word, the Level tag is used. The Analepsis tag is also opened here, and is nested inside the Level tags because the level change is the primary feature happening here, and the analepsis is a result of it. Both tags are closed several pages later, at the end of the story and also the chapter. Here we see how the previous chapter ends and the embedded narrative begins.

> "Now about the girl, Dick," he said. "Of course, I want to find out about you and tell you about myself, but first about the girl, because I have been waiting to tell you about it so long."
>
> He searched for and found a sheaf of papers in a filing cabinet but after shuffling through them he found they were in his way and put them on his desk. Instead he told Dick the story.
>
> III
>
> ⟨**level DEGREE="2"**⟩⟨analepsis⟩About a year and a half before, Doctor Dohmler had some vague correspondence with an American gentleman living in Lausanne, a Mr. Devereux Warren, of the Warren family of Chicago. A meeting was arranged

and one day Mr. Warren arrived at the clinic with his daughter Nicole, a girl of sixteen. She was obviously not well and the nurse who was with her took her to walk about the grounds while Mr. Warren had his consultation. . . . ⟨/analepsis⟩⟨**/level DEGREE="2"**⟩

Analepsis

An example of how the analepsis tag can be used is in the following encoded segment of *To the Lighthouse*:

> She turned the page; ⟨fid PERS="Mrs. Ramsay"⟩there were only a few lines more, so that she would finish the story, though it was past bed-time. It was getting late. The light in the garden told her that; and the whitening of the flowers and something grey in the leaves conspired together, to rouse in her a feeling of anxiety. What it was about she could not think at first. Then she remembered; Paul and Minta and Andrew had not come back. She summoned before her again ⟨**analepsis**⟩the little group on the terrace in front of the hall door, standing looking up into the sky. Andrew had his net and basket.⟨**/analepsis**⟩ That meant he was going to catch crabs and things. That meant he would climb out on to a rock; he would be cut off. Or coming back single file on one of those little paths above the cliff one of them might slip. He would roll and then crash. It was growing quite dark.⟨/fid⟩

Here the narration moves from regular omniscient narration to free indirect discourse from the perspective of Mrs. Ramsay, with the instance of analepsis occurring within the free-indirect-discourse section. The analepsis tag is opened when Mrs. Ramsay remembers the image of Paul, Minta and Andrew standing in the doorway earlier in the evening, and is closed when she moves on from the memory to speculation about what they might be doing, which is disconnected from narrative time because it is not a thing that we know is definitely happening, whereas the event in the analepsis tags definitely did.

The following is another example, from *my body - a Wunderkammer* by Shelley Jackson:

> My eyebrows are thick and dark with a witchy point at the arch I sometimes exaggerate with pencil, remembering ⟨**analepsis**⟩the day after Halloween when I was ten or eleven. I could never get off all the greasepaint the night before. My eyebrows

were black, glowering, joined with a shadow over my nose. I remember staring at my pale face in the bathroom mirror. I was wearing a light blue t-shirt I disliked. I looked dirty, like a pirate. I rubbed a bunch of toilet paper across my eyebrows and threw the blackened wad away, reached for more. Officially, I despised make-up, though secretly, guiltily, I was fascinated by it. But nobody could blame me if I just didn't wash my face. I went to school smudged and interesting. When people commented on my eyebrows, I gave explanations, feigning exasperation at the inefficacy of soap.⟨**/analepsis**⟩

Here we have a present-tense description given by the adult, moving into narration in the past tense of a specific event from childhood. The tag is opened at the point where we move into the past; the verb 'remembering' is describing an action by the adult narrator in the present.

Prolepsis

A useful example of prolepsis can be seen in this short excerpt from *The House in Paris* by Elizabeth Bowen:

> The house, with its clean tight blinds across inside darkness, managed to look as proud as any in the street; there was nothing bijou about it; it looked stern. ⟨**prolepsis**⟩Henrietta heard later that the site was valuable;⟨**/prolepsis**⟩ Mme Fisher was, in spite of her poverty, most obstinate in refusing to sell.

This is not part of dialogue, it is relatively omniscient narration. The parts describing the house and Mme Fisher are happening in the present moment, but the reference to Henrietta learning about the value of the house is a brief jump to narration of a future event. We know this is some time in the future not only because the narration tells us that Henrietta learning about the value of the house happens "later," but also because Henrietta is a child, and so unlikely to understand property valuation until she has grown older. This shows how useful the context that we gain from reading can be when annotating.

Stream of consciousness

The entire first two sections of *The Sound and the Fury* take place within stream-of-consciousness narration. Accordingly, each section is entirely contained within a single SOC tag. In the fol-

lowing excerpt we see the beginning of Quentin's section. The section begins with a Level tag because again that is the primary overarching aspect of the section and the first thing that needs to be noted, that this is one of the novel's four horizontally-arranged narrative levels beginning. Then the SOC tag is opened and we can see that this is very much Quentin's stream of consciousness, as he is both focaliser and narrator, and is narrating his thoughts in real time. His mind jumps around in time as he narrates, holding many moments from the past together in his mind. As such this example also shows how several different tags can be used together. Both the Level tag and the SOC tags end at the end of Quentin's section.

> ⟨level⟩⟨**soc**⟩When the shadow of the sash appeared on the curtains it was between seven and eight oclock [sic] and then I was in time again, hearing the watch. It was Grandfather's ⟨analepsis⟩and when Father gave it to me he said I give you the mausoleum of all hope and desire; it's rather excruciating-ly apt that you will use it to gain the reducto absurdum of all human experience which can fit your individual needs no better than it fitted his or his father's. I give it to you not that you may remember time, but that you might forget it now and then for a moment and not spend all your breath trying to conquer it. Because no battle is ever won he said. They are not even fought. The field only reveals to man his own folly and despair, and victory is an illusion of philosophers and fools.⟨/analepsis⟩ . . . ⟨**/soc**⟩⟨/level⟩

Free indirect discourse

In the following paragraph from *Pointed Roofs*, the opening sentence is an objective statement about Miriam's reaction to something her sister Harriett has just told her. Similarly the second sentence, a description of Miriam's physical movement in the room, is objective and would be observable by anyone else. By contrast, the impressions that come in the succeeding sentences are known only to Miriam, and, through her free indirect discourse, to the reader:

> Miriam's amazement silenced her. She stood back from the mirror. ⟨**fid PERS="Miriam"**⟩She could not look into it until Harriett had gone. The phrases she had just heard rang in her head without meaning. But she knew she would remember all of them. She went on doing her hair with downcast eyes. She had seen Harriett vividly, and had longed to crush her in her arms and kiss her little round cheeks and the snub of her nose. Then she wanted her to be gone.⟨**/fid**⟩

The PERS attribute is used to describe which character is currently providing the perspective for the free-indirect discourse narration. The use of this attribute is technically optional, but it is recommended when the narration in one novel is taken over by different characters' perspectives at different times, as in *To the Lighthouse*, and it can, of course, still be used when the focalisation only comes from one character, as in *Pointed Roofs*.

5.6.3 Defining the annotation span

The criteria for beginning and ending annotation spans is applicable to all phenomena addressed here. The annotation should begin at the point in the text where the narrative transitions either to a higher or lower level, a different point in time, or into or out of stream-of-consciousness or free-indirect-discourse narration. This can occur in the middle of a sentence, and can continue into another sentence, paragraph, or chapter. The annotation is ended when the phenomenon ends and the narration returns to the level it had previously been at (or changes to a different level again), returns to the point in time it had left behind in its deviation (or jumps again to a different point in time), or changes back to omniscient narration after its spell in more subjective narration has ceased. When using XML, the relevant tag is opened and closed at these points.

To be more specific, the opening tag should be added when the new narrative or new point in time is being described, but not before the words that introduce it. For example, in the novel *Pointed Roofs* by Dorothy Richardson, there is an early instance of the protagonist travelling to Germany, and thinking about the night before at her family home in England. She is on a boat, looking at the shore, and then her mind takes her (and us) to a different time (and place). The annotated piece of narration is:

> In her tired brain the grey river and the flat misty shores slid constantly into a vision of ⟨**analepsis**⟩the gaslit dining-room at home... the large clear glowing fire, the sounds of the family voices.⟨**/analepsis**⟩

In that example, the words "a vision of" are not part of the actual flashback; this only begins with the definite article "the," assigned to the gaslit dining-room.

In terms of punctuation, when the narrative phenomenon being encoded ends at the end of a sentence, the corresponding closing tag should be placed immediately after the full stop, as the

full stop is the conclusion of that semantic unit. If a narrative phenomenon begins and ends inside em dashes, the dashes should be excluded from the annotation, with the tags beginning and ending immediately inside them, because the em dashes are only markers of transition. The full stop is tied to one side of the division it marks, whereas em dashes belong equally to both sides, so they cannot be said to be part of the analepsis, or narrative level, or piece of stream-of-consciousness narration, for example. If a narrative phenomenon ends at a point in a sentence where there is a comma, the comma is also a mark of transition, and yet it is more tied to the words that precede it than the ones that follow - unlike an em dash - so the closing tag should be placed immediately after the comma. Extra blank spaces should never be included: the tag should always be immediately before or after a word or punctuation mark.

5.6.4 The future of the schema

It is hoped that this annotation scheme will continue to be used by me and by others - as the schema file and guidelines will be made freely available online - in the future, both on its own and in combination with other annotation systems, in particular ones that can be applied automatically and used for comparison against my system, like TimeML. This system is useful for its intended purpose, but it is flexible enough to have other purposes, and the nature of XML allows these tags to be easily incorporated into other systems. Certainly it does not exist in isolation, as the other annotation guidelines from the SANTA project (about which more will be explained shortly) address similar aspects in the area of narrative levels. This system is useful for manually annotating fiction texts for comparisons across genres and time periods; that gives it a lot of scope for future use.

5.7 Methodology Part III: Explication of the rest of the methodology

When the methodology of this project in put into practice, the modernist and hypertext fictions from the corpus are annotated manually using the schema which has been constructed for this project. As stated, its tags are: text, analepsis, prolepsis, level, SOC, and FID. These tags have been created in order to annotate, in the most efficient way possible, the narrative features with which this project is concerned.

Once the texts have been encoded, a number of features are measured quantitatively. They are:

1. Numbers of each of the analepsis, prolepsis, narrative level, stream-of-consciousness and free-indirect-discourse tags in each text.

2. **Proportion:** Numbers of words contained within analepsis and prolepsis (the key statistics for the project), both as raw numbers, and more significantly, as proportions of the overall word count of each text.

3. **Normalised frequency:** How frequently each tag occurs relative to a baseline of 10,000 words (McEnery and Hardie 49). The base of normalisation is arbitrary, but should be similar to the size of the group of words being analysed. 10,000 is used here because most of the texts in the corpus have word counts that exceed 10,000 but are lower than 100,000, making 10,000 words a useful unit in which to observe frequency. In addition, this base provides results that have more digits before decimal, which makes tables easier to read.

4. Distribution: The number of times each tag occurs in each percentile of each novel. This is shown graphically, and can only be done for the modernist novels because they are linear whereas the hypertext fictions are not.

5. Average numbers of words contained within analepsis and prolepsis relative to average page or lexia length for each text.

The proportion of words spent in narrative features related to time, and the frequency of tags that mark the points of transition, are important to record and analyse because they allow direct comparisons of the narrative strategies and structures of literary texts from different genres and time periods. We can see how different or similar these texts are in their treatment of narrative time, in a way that is concrete. Taking numbers as relative proportions of total word counts and page numbers is self-evidently necessary because the texts are all different lengths. Lexias are somewhat useful as units of measurement for the hypertexts, but these can vary in length more than pages in a printed book do, so it is essential to always make comparisons relative to word counts as well.

Graphs are useful for identifying patterns and anomalies that one may not see otherwise, because they afford a new perspective on the data. They are also useful for efficiently communicating the data to a reader. The studies mentioned earlier in this chapter - particularly Clement's

- show the insights that can be achieved from graphical representations of data. Some of the main types of graphs used in this project are bar charts of (a) the proportion of words contained within analepsis and prolepsis tags relative to the word counts of the texts (because they are the most significant tags in relation to time), and (b) the normalised frequency of the tags themselves in each text. Normalised frequency is simply the number of a times a particular tag occurs in a text, divided by the total word count of that text, with that result multiplied by 10,000. This calculation comes from McEnery and Hardie (49), and the base of normalisation of 10,000 is essentially arbitrary, but is somewhat similar to the length of the texts in this corpus, most of which are in the tens of thousands of words. Additionally, line charts are used to show the distribution of words in analepsis and prolepsis over the percentiles of each modernist novel. This can only be done for the modernist novels because only they have linear structures, the hypertexts do not. The visualisation experiments for this project had begun by making line charts showing whether there were tags present or not for each line of text in an XML file. This created a kind of heat map (which looked like a bar-code) where lines closer together indicated tags used close together, but this kind of graph was not useful enough because it was difficult to read - indeed, there were more lines on the graph than there were pixels on the computer screen - so the line charts of percentiles of the novels was implemented instead as a more effective way of showing peaks and troughs of narrative features over the course of a text. In Chapter 6 the line charts for all the novels are overlaid to show a direct comparison of the distribution of words in analepsis over their spans. The bar charts are also significant for comparison, as are the tables of results, which directly show data from all the different texts together. In concert, all of these graphs and tables help us to understand how the narratives in these texts function.

Analysis of the data and the graphs generated from it leads us back to close readings of the original texts. This return to the texts allows one to match particular usages of narrative features to what is happening in the story. Possibilities could for example include clusters of memories, the narration moving back and forth rapidly, an extended sequence in the past before catching up to the point from which the narrative had departed into the analepsis. Doing this shows the aspects of the story that drive the need for experimental narrative features. This practice also invites thought about further potential reasons why the narrative features in these texts are being used in the way that they are, like the influence of philosophies of time on the practice of narration.

XML and quantitative measures allow the analysis of temporal narrative structures of different

kinds of texts to be done with more precision than could be achieved with traditional literary methods. This methodology can show exactly where spans of narrative disruptions begin and end, and what their length and frequency can tell us about the narrative strategies of a text. It can catch clusters and other patterns of usage that might be missed otherwise, identify similarities and differences across texts, and compare in detail texts of very different structures both on the sentence level, and on a large scale, taking their whole word counts into consideration. This methodology shows what can be done once texts are encoded for their temporal narrative characteristics - what that translation of narratological concepts related to time into XML can yield - and is thus a measure of the usefulness of that translating, schema-creation and encoding process.

5.8 The SANTA project

The work on narrative levels in this thesis has been informed by my participation in the Systematic Analysis of Narrative Texts through Annotation (SANTA) project, part of the Shared Tasks in the Digital Humanities initiative run from the University of Hamburg. The SANTA project is an international collaborative project involving teams and individuals with expertise in narratology, computer science and digital humanities. The project has two phases. The first phase involves eight teams or individuals each creating separate annotation guidelines with a focus on manually annotating narrative levels in fiction. After testing, comparison, discussion, and workshopping the aim is to reach a consensus where all participants can agree on a single set of annotation guidelines. The second phase of the project would use more computer scientists to train a machine learning program to learn the annotation system in order to eventually be able to automatically annotate narrative levels. Currently the project is in the first phase. Each team created their guidelines in 2018 and tested them on a small corpus of fiction. The organisers in Hamburg also tested each guideline using student annotators in order to generate statistics on inter-annotator agreement.

One of the principal points of attention for the SANTA project has been to define just what a narrative level is. Those discussions have influenced the way narrative levels are presented in this chapter and used in the XML schema of this PhD project. Indeed, the very inclusion of narrative levels in my own schema was partially influenced by my involvement in the SANTA project. The inclusion was appropriate because narrative level changes can sometimes occur at

the same time as analepses. So, while temporal changes are the main focus of my project, other narrative devices such as subjective narration and narrative levels are very useful to annotate in terms of their relation to temporal changes. In this sense, my schema is designed to serve the goals of my own research while also being applicable to the SANTA project. Working with the SANTA project has also helped me to move towards a more multifaceted definition of narrative levels, which is reflected in this chapter. It has been very useful both to receive feedback on my own annotation guidelines and to learn from reading other people's guidelines and seeing how they function. Being part of the narratological-theory phase of the SANTA project has also allowed me to expand the reach of my research beyond Ireland and interact with other researchers working in similar fields.

5.8.1 Inter-annotator agreement

The guidelines submitted for the SANTA workshop were tested for inter-annotator agreement (IAA). Each annotation guideline was implemented by a student annotator hired by the project, and by one of the other participants in the SANTA project, on the same texts. The organisers then compared the results of these annotations. Gius et al. explain that to derive the IAA figures, the project "employed the metric γ (gamma) as developed by Yann Mathet, Antoine Widlcher, and Jean-Philippe Mtivier. Its final score combines observed disagreement with chance disagreement (γ is thus calculated using disagreements, while most metrics are calculated using agreements). This is done in order to be able to compare evaluation schemes with different complexities and to avoid favouring more simple schemes (if the scheme is simpler, chance agreement is higher)" (8). The IAA result for my guidelines was 0.24 in gamma (Willand et al. 8). In gamma, a score of 1.0 would be total agreement while 0.0 would signify no agreement beyond pure chance (Mathet et al. 442). By normal IAA measures, 0.24 is quite low, but all of the scores in the SANTA project were similarly low. The IAA for my guidelines was the third-highest of the eight annotation guidelines, with results ranging from 0.05 to 0.30. The global low scoring may show that reaching agreement between annotators about annotating such highly conceptual features as the places in a text where narrative levels change is inherently difficult. The SANTA project is part of a process to try to reach a greater level of agreement though, and to ultimately create computer programs that can make decisions about how to annotate narrative. Regardless, the IAA score for my guidelines shows in a quantifiable way that they are as useful as similar guidelines developed for a shared purpose by experts in the field.

5.9 Conclusion

As has now been shown, this methodology combines several influences into a process which takes a new approach to analysing narrative time in fiction. The process has been inspired by manual and automatic annotation systems for certain features of narrative, which had not addressed the specific focus of this project. It was necessary to undertake manual rather than automatic annotation because of the high-level reasoning required to annotate (often subtle) transitions in narrative time and diegetic level, and instances of subjective narration - the kinds of phenomena which NLP programs cannot yet identify. XML was chosen as the best language through which to create a system for annotating these features, due to its combination of flexibility, simplicity, and familiarity to me and to others. Indeed, a simple and flexible schema was created which has a smaller tagset than the annotation systems which influenced it, but which tags can be modified using their attributes and combined with each other to capture the interactions of the narrative phenomena on which this project is focused. For its purpose, this system is the most efficient method. It also allows spans of text to be encoded rather than single words, which is important when showing sections of texts affected by narrative disruptions, but also when counting words contained in tags on a sentence-to-sentence level, whether that is within hypertext lexias or the pages of a book. Related work in text-mining of fiction has shown the usefulness of quantifying and graphing features of texts, what that can reveal about their structure, and how quantitative measures can be used to compare large groups of texts. This project adopts a quantitative, comparative approach for its manually-annotated and extracted data. It uses those numbers, and graphs based on them, to direct one back to close analysis of the text. We see what is happening in the narrative in numerical terms, then we must determine its cause in story terms, and compare those numbers and their causes across different texts. This process of annotation, quantifying, graphing, and comparison gives us a new way of comparing different kinds of texts. It fills a knowledge gap by creating a specific combination of tags which faithfully represents the narratological approach of the project: the focus on narrative time as it interacts with other features that disrupt straightforward narration. The project also incorporates research on the influence of philosophies of time on literature. All of this combined allows the project to address a combination of narrative features, both conceptually with traditional literary analysis and concretely in XML, examine specifically how, how much, and how frequently those features are used in fiction, and explore the possible reasons for those

effects.

Chapter 6

Memory Speaks: Results and Discussion

6.1 Introduction

The modernist novels and hypertext fictions in this corpus show a similar preoccupation with the past, and the remembering of it in the present. This is visible through the results of the analysis, which show similar proportions of total word counts being spent in analepsis in seven of the thirteen texts in the corpus. By combining that distant reading with close reading of the texts themselves, with attention paid to particular moments of narrative transition highlighted by the data, it becomes clear that the texts in the corpus use so much analepsis in order to evoke a subjective experience of the simultaneity of time. This analysis is built upon the more traditional narratological work in the earlier chapters, which already showed that temporal and narrative level disruptions in texts are part of an effort to represent subjective experiences of time that has been driven by changing cultural and philosophical ideas about time. This chapter shows the extent to which this disruption is enacted, and the similarities in the texts from both genres despite their formal differences. There are some caveats to the claims that this chapter makes. It is important to note that similarity does not necessarily imply an influence of one genre over the other; it is only similarity. If there had been no similarity, that in itself would have been a valuable result in showing that regardless of the thematic connections between these two genres, that connection is not reflected in the data of their narratives. However, these results are not inconclusive; there are connections between the data from these texts. A

further caveat is that it is not claimed that these results reveal similarities in the whole genres of modernism and hypertext. Any connections only apply to these particular texts. The texts are varied, with different styles, structures, and publication dates, but they do not represent their entire genres. They share an experimental approach to narrative temporality, with memories often taking up a fifth of the narration in a text. That is only visible through the encoding and analysis techniques of this thesis, and the reasons for it are only visible through combining that with close reading; that combination will be the focus of this chapter.

In the course of this chapter, statistical measures will be applied first to the corpus as a whole, and then to individual texts in more granular detail. First we will analyse the frequency with which analepsis and prolepsis tags occur in all the texts in the corpus, and how they compare to each other as a group. Analepsis and prolepsis are the initial focus because narrative temporality is the greatest concern of the project. Following the discussion of frequency, our attention will turn to the proportion of words in the texts that are spent inside those anachrony tags. Again, this subsection will address the corpus as a whole. Then, each text will be discussed individually using a combination of both frequency and proportionality data to support literary arguments for why the texts function as they do. Finally, narrative levels will be addressed, with the frequency of their tags and proportionality of the words spent inside them compared to the statistics of the anachrony tags. All of these things help us to better understand how the narratives of these texts function; the data informs the literary arguments. Specifically, the data shows similarities in the proportion of words spent in analepsis in a majority of the texts in the corpus, from both genres. This indicates a shared obsession with the past. Temporal disruptions are used to convey the importance of the past thematically in the texts. Analysis of the data then leads us to close readings of the individual texts, where we see the reasons for the anachronies. In *The Sound and the Fury* memories are triggered by words that cause associations within the minds of the characters. In *Twelve Blue* the characters process emotions in the present by remembering significant moments from the past that often involve water or the colour blue. In *Pointed Roofs* analepsis corresponds to Miriam Henderson analysing her day, and the gradual decline in its usage over the course of the novel suggests a lessened need for Miriam to do so. In *my body - a Wunderkammer* analepsis allows the unnamed narrator to reflect on how her body has changed over time and how this has related to the evolution of her self. When we examine the frequent usage of analepsis in the final section of *To the Lighthouse*, we discover that many of the analepses involve the various characters remembering the departed

Mrs. Ramsay, underlining the importance her to the people whose lives she touched. In all of these cases the anachronies are happening because the characters are remembering, reliving the past in the present. It would not have been possible to do these close readings supported by data without the encoding and analysis. In this chapter, distant reading will show how much analepsis happens, and lead us to these and other examples in the text that show the reasons why analepsis is used as much as it is in these texts: to evoke the subjective experience of memory, the simultaneous experience of the past in the present.

6.2 Frequency of analepsis and prolepsis

One of the first things to consider across the corpus is how frequently each tag is occurring in each text, relative to the word counts of those texts. The tags mark the moments of transition between one state of narration and another. By analysing how frequently analepsis and prolepsis tags occur, we are really analysing how frequently a narrative moves in and out of analepsis or prolepsis. This measuring of discontinuity can tell us how temporally fragmented a text is. Frequent instances of analepsis in a text can also reveal whether a text has a particular fixation with the past. The brevity of hypertext lexias can affect frequency of anachrony tags, so frequency makes us pay attention to the structure of a text. Some texts will stand out above the crowd in their own right, regardless of their overall structure, because differences in frequency of tags emerge on the sentence-to-sentence level. Furthermore, the statistics that emerge will show some differences between the two genres in this corpus, and it requires a literary perspective to determine what that difference implies, if anything. One cannot rush to a conclusion that the statistics show influence of one genre over the other. But we can analyse what is here, and compare it with other factors. For example, frequency is combined with other statistics to show us how long a text is likely to spend in an instance of anachrony when it is used. Frequency is the first step to understanding how a text uses narrative techniques, and it is something that can be compared regardless of whether a text is a novel or a hypertext fiction.

To achieve a relative comparison across texts of different lengths, normalised frequency has been used, which is simply the number of a times a particular tag occurs in a text, divided by the total word count of that text, with that result multiplied by 10,000. Most of the texts in the corpus have lengths in the tens of thousands of words, so taking 10,000 as a base in which to

observe frequency is useful. The figure below shows the normalised frequency for the analepsis and prolepsis tags across all texts in the corpus. Analepsis and prolepsis are focused on because they are the most significant tags for the themes of the project, but attention will be given to the narrative level tag later.

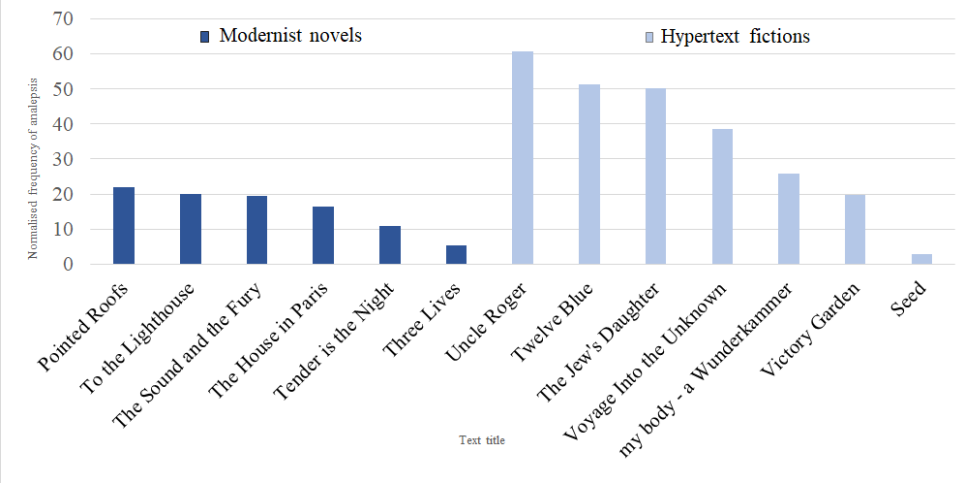

Figure 6.1: Normalised frequency of analepsis tags in all texts

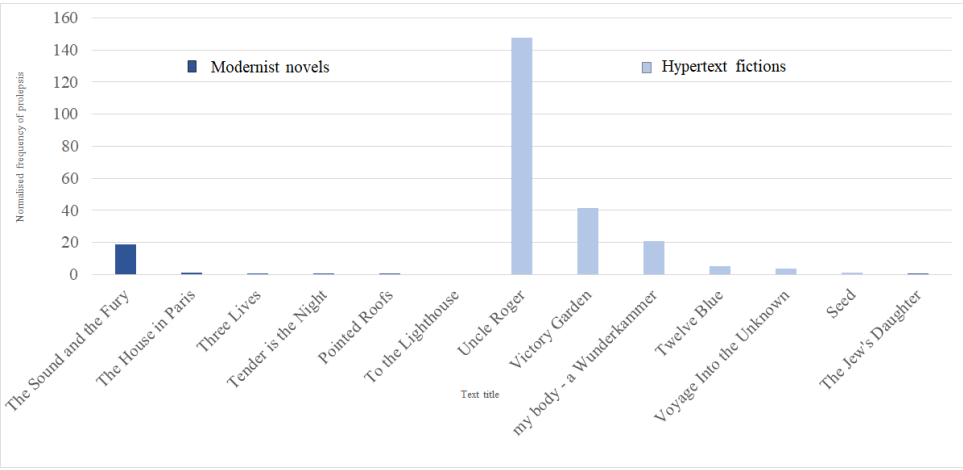

Figure 6.2: Normalised frequency of prolepsis tags in all texts

These graphs show that, for the most part, both analepsis and prolepsis occur more frequently in these hypertexts compared to these modernist novels. Five of the seven hypertexts have more frequent instances of analepsis than any of the modernist novels. Of the two hypertexts with the least frequent usage of analepsis, *Victory Garden* has a similar normalised frequency to many of the modernist novels, while *Seed* has a much lower frequency, due to its functioning slightly differently as a narrative than the other hypertexts, still with recognisable lexias and links but with more usage of changing narrative levels than anachronies. On the other hand, *Uncle Roger*, *Twelve Blue*, and *The Jew's Daughter* all use analepsis more than twice as frequently as any

of the modernist texts. Prolepsis, while less frequently used in most texts than analepsis (with some notable exceptions in *Victory Garden* and particularly *Uncle Roger*), is still also more frequently used in the hypertext fictions than the modernist novels. In these novels, prolepsis is only used with notable frequency in *The Sound and the Fury*. That is due to the particular stream-of-consciousness narration styles of the first two sections of that novel, which move backwards and forwards in story time to different events very frequently.

The more frequent usage of prolepsis in hypertext fictions is partly due to a structural issue which is somewhat similar to the structures which create frequent usage of prolepsis in *The Sound and the Fury*. In the first two sections of Faulkner's novel the narrative is very fragmented, consisting of pieces from different points in time mixed up and relayed out of sequence, with frequent transitions. That description could also be applied to many hypertext fictions. The ones in this corpus have frequent prolepsis partly because of their nature as hypertexts. Each hyperlink, each jump from one lexia to another, creates discontinuity, fragmentation. However, story lines do emerge as the reader encounters lexias in succession. Some of these story lines move forward in time in an elementary fashion, but they still have inherent breaks in continuity because of the hyperlink, so in essence each new lexia in this sequence is in itself entirely an instance of prolepsis. Also, often the next lexia in a sequence will recognisably go back in time, to an earlier point in that particular story line, or else to some other event which the reader will know is earlier in story time because of the context they have already built up from reading that hypertext fiction. So this phenomenon does affect the overall frequency of analepsis in the hypertexts, but to a far lesser extent than with prolepsis, as we will see. Full-lexia analepses and prolepses do not always occur; many times a hyperlink will take a reader to an entirely new storyline, or just a lexia that exists on its own outside of any story line or continuity. These kinds of lexias cannot be classified as a whole, they are not possible to pin down in story time, which results in the situation we see in the data where many (but by no means all) of the hypertexts' lexias are classed as wholly analepsis or prolepsis.

When those whole-lexia-encompassing tags are taken out of consideration, and we only count prolepsis tags that are actually within lexias, they still occur slightly more frequently than in the modernist novels, apart form *The Sound and the Fury*. So, the reason for the increase is not just structural, there is actually a difference on a sentence-to-sentence level in how these two genres tell their stories. Perhaps the sentence-to-sentence narration of the hypertexts is itself more temporally fragmented than the modernist novels, more likely to feature references to things

that occur later in story time. The stories are told in a diffuse way already, it would make sense to have more jumps forward within narration, rather than modernist novels which are more bound to telling a story in a relatively linear progression with many references to the past, but not to the future. In the modernist novels, the future is only arrived at when the narration naturally catches up to it, they do not have fragmented jumps forward, except very occasionally. For example, there are some narrative premonitions in *The House in Paris* which reveal some things about the fates of the characters in the future. This underlines how bound the characters all are to their inevitable fates, and also reveals the omniscience of the narrator, a figure high above the action watching all the characters move along their set paths. Even though the novel uses free indirect discourse frequently, the narrator maintains the ability to pull away entirely and reveal what Henrietta would think about the house years later, for example. Overall, the frequency of usage of prolepsis within these hypertext lexias is not massively different from the frequency of prolepsis tags in the modernist novels. The more significant difference is in the frequency of usage of analepsis tags. Those figures are affected far less by counting only the analepsis tags within lexias; this is the vast majority of the usage anyway. So in this sense we can say there is a definite increase in the frequency of usage of analepsis in the hypertexts compared to the modernist novels, which is not at all merely a result of lexias as a whole being anachronies. The hypertexts use analepsis more frequently in their regular narration than the modernist novels do.

Overall, the average normalised frequency for analepsis is 15.66 in the modernist novels and 35.63 in the hypertext fictions. The same statistic for prolepsis is only 3.59 in the modernist novels but 31.47 in the hypertext fictions. This underlines that while analepsis is quite frequent in these modernist novels, it is much more frequent in these hypertext fictions. It is tempting to wonder whether hypertexts are taking the practice from modernist novels of frequently diving into the memories of characters, and taking it even further, becoming more radical by using the technique more frequently. The data also shows that the modernist novels tend to be quite similar to each other in terms of how frequently they use both analepsis and prolepsis, while the hypertexts have a more diverse range of normalised frequencies. This can be quantified. The standard deviation of the normalised frequencies of analepsis tags is 6.41 in the modernist novels, while for the hypertexts it is 20.54. Meanwhile the equivalent statistic for prolepsis is 7.5 in the modernist novels and 53.36 in the hypertexts. This indicates that the modernist novels are more consistent in their approaches to narrative temporality, while the hypertexts

fluctuate more in this regard, perhaps at least partly due to them having more diverse formats of lexias and links. There are certainly some structural features of hypertext that contribute to them having more frequent analepsis and prolepsis. We should address these before getting to literary or narrative reasons for the increased frequency of analepsis in the hypertexts.

Another reason why analepsis and prolepsis are both more frequent in the hypertexts than in the modernist novels is a similar but separate structural issue related to the lexias of hypertexts. A hypertext lexia is a sort of self-contained unit within a larger unit, the overall text. As a result, any tag used in a lexia is opened and closed within that lexia, because the next lexia encountered is a separate entity, a different fragment separated by the discontinuity created by the hyperlink break. Analepsis and prolepsis tags can only occur within lexias, they cannot span across many pages as they can in a book (we will discuss very long analepses in modernist novels later in this section). This is compounded by the fact that on average, lexias are shorter than pages of a printed book in terms of words. The average page length of the modernist novels is 340.93 words, while the average lexia length is 191.19 words. The average analepsis length is 245.69 words in the modernist novels but only 43.45 words in the hypertext fictions, while the average prolepsis length is 266.33 words in the modernist novels and 93.1 words in the hypertext fictions. The relative brevity of the hypertext lexias combined with each lexia being its own semantic unit means that analepses and prolepses are likely to be shorter and more frequent in the hypertexts. Although we note that the average prolepsis length in the modernist novels is driven up by *The Sound and the Fury*, which has a much higher number for this than any of the other modernist novels here. Similarly to the case with frequency of prolepsis, Faulkner's novel has a larger average length of prolepsis because it uses temporal disruptions more radically than the other novels. Notably for this statistic, *The Sound and the Fury* uses prolepsis as a principal device in its first two sections, spending many sentences at a time within prolepsis. By contrast, when the other modernist novels use prolepsis at all it tends to be only for quick flashes, less than a full sentence long. So, again, the numbers are affected by the fact that Faulkner's novel is playing with time in a basically similar way but to a more radical extent than the other modernist novels. If we take *The Sound and the Fury* out of consideration, the average prolepsis length in the modernist novels drops from 266.33 words to 54.96 words. When this is done, the average prolepsis length in the hypertexts is now longer than that of the modernist novels, despite the formal constraints of the hypertexts' short discrete units. That perhaps reflects how little the modernist novels other than Faulkner's tend

to use this technique, and that as we have said, when they do use it, they do not use it for very long at a time. The average analepsis length for the modernist novels is not so much affected by removing *The Sound and the Fury*. The figure actually increases slightly, from 245.69 words to 291.06 words because *Three Lives* carries more weight in the statistic now, and its average analepsis length is much longer than any other text in the corpus, modernist or otherwise. This relative stability of the statistic shows that *The Sound and the Fury*'s average instance of analepsis is not especially long compared to its peer texts, and that the difference with prolepsis is truly driven by the fact that it uses it much at all. This shows that the argument about the hypertexts' shorter sections affecting their length of anachroinies still stands for analepsis. It also shows just how short prolepses tend to be in modernist novels, that they are shorter even than the ones in the hypertext fictions despite the formal constraints of those texts. This is because of the narrative style of the modernist novels; they do not jump forward in time for long, but are instead preoccupied with the past and will spend long spells in analepsis. Prolepsis is less useful to them as a device, because they move forward continuously; most of the discontinuity is directed into the past. So we have learned that in general modernist novels have longer but less frequent analepses than the hypertext novels, and they have less frequent prolepses also, which apart from *The Sound and the Fury* actually tend to be even shorter than those found in the hypertexts, because of structural factors but also because of the manner in which they tell their stories.

Analepsis is quite frequent in the modernist texts, but even more frequent in the hypertext ones. Thematically, the frequency of analepsis in the modernist novels makes sense. As a genre, modernism is preoccupied with the past, both in a macro sense (taking an old form in the novel and reinventing it with new techniques and structures, a new degree of experimentation) and in a micro sense: modernism is often obsessed with memory, and the novels in this corpus are no exception. Following from this, if analepsis occurs even more frequently in the hypertexts it is reasonable to ask whether that is the result of a shared obsession with the past, or other factors in their content. Certainly the hypertexts concern themselves greatly with time as a continuum, with their narratives moving quite freely between different points in story time. While modernist novels can be narratively fragmented, hypertexts are fragmented far more and in a different way, which is allowed by their form. While modernist texts retain some of the traditional qualities of novels - telling essentially one story, broadly from start to finish, in a relatively stately manner - hypertexts are more chaotic. They are free to be even more

experimental than their modernist forebears because of the medium of hypertext. In content, these hypertexts are at least as obsessed with the past as the modernist novels, and give even more attention to time as a continuum, the relationship between past, present, and future. That increased concern with time, coupled with the short and discrete nature of hypertext lexias, leads to more frequent usage of transitions between points in time. This does not, however, tell us everything we need to know about the usage of analepsis and prolepsis in the modernist novels and hypertext fictions in this corpus. To get a clearer and more nuanced idea of how, how much, and where these narrative techniques are being used, we must next examine how much analepsis and prolepsis are being used in the texts in terms of numbers of words within the XML tags, not just individual tags. This will show us the cumulative effect of the usage of these techniques and differentiate between brief and lengthy instances of them. We can measure proportionally how much of a text is happening in analepsis and prolepsis relative to its overall word count. Furthermore, this approach will lessen the impact of the structural differences between modernist novels and hypertext fictions, and show more clearly the extent to which narration in different times is used in the actual content of the texts.

6.3 Proportion of words in analepsis and prolepsis

The graph in Figure 6.3 tells quite a different story than the frequency graphs, which showed higher frequencies of analepsis and prolepsis in the hypertexts than in the modernist novels. When one compares the proportions of a text's word count contained within analepsis and prolepsis, the results are more diverse, and the supposition that hypertext uses anachrony more than modernism is not so straightforwardly evident. Instead we see a richer basis for comparison, with some strikingly similar statistics across the two genres, and some texts that do not conform. The texts that show similarities and the outliers all deserve attention. We will turn to them after briefly detailing how these statistics were created.

Figure 6.3 shows, simply, the percentages of words in each text that occur within analepsis and prolepsis tags. The words contained within every instance of the tag are added up, and then represented as proportions of the overall word count of a text, so that texts of different lengths can be compared fairly. Later in this chapter, more detailed figures on words in analepsis within pages, and within lexias, will be discussed. The purpose of these word-count figures is to show the extent of analepsis usage in the texts. This is a key indicator of usage, perhaps even more

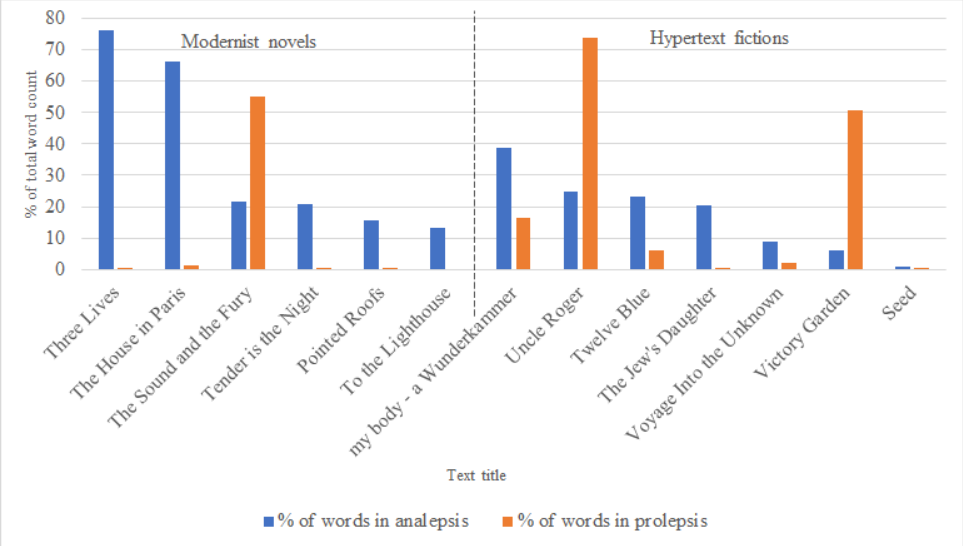

Figure 6.3: Percentages of words in analepsis and prolepsis relative to total word counts of each text

significant than frequency - it is more valuable with these narrative phenomena to see how long is being spent in them, in terms of words, rather than just how frequently they occur. This is also, like normalised frequency, a normalised measure that can be used to compare all the texts against each other regardless of their form.

There are similar proportions of words within analepsis relative to total word count in seven of the thirteen texts across the whole corpus. *The Sound and the Fury*, *Tender is the Night*, *Uncle Roger*, *Twelve Blue*, and *The Jew's Daughter* all have proportions of words in analepsis that are close to 20%. The statistics for *To the Lighthouse* and *Pointed Roofs* are just slightly lower, with 13.28% and 15.45% of their words in analepsis respectively. These numbers are significant because of the similar percentages in texts of different genres. There is not a stark difference between modernist novels and hypertext fictions, as there had been when comparing normalised frequency of analepsis tags. In that instance, *Uncle Roger*, *Twelve Blue*, and *The Jew's Daughter* all had much higher frequencies than any of the modernist novels. When the words within analepsis are counted though, proportionally those three hypertexts now appear to have quite similar amounts of analepsis to most of the modernist novels (four of the six). This suggests that the differences between the two genres' treatment of narrative time are not so absolute.

There is a simple potential formal reason why the proportions of words in analepsis in *Uncle Roger*, *Twelve Blue*, and *The Jew's Daughter*, while still high, are not nearly as high as their normalised frequency of analepsis, compared to the other texts in that respect. It is that in those

three texts, instances of analepsis are very frequent but tend to be quite short. This is supported by more statistics: the average analepsis length is in *Uncle Roger* is 38.34 words. For *Twelve Blue* the same statistic is 44.53 words and for *The Jew's Daughter* it is 39.99 words. Those are all shorter than any of the average analepsis lengths from the modernist novels. They are not exceptionally short for the hypertexts in this corpus though, because as we have mentioned before the average analepsis length across all of those hypertext fictions is 43.45 words; the figures for Malloy, Joyce, and Morrissey and Talley's texts are all close to that number. They actually all have longer average analepsis lengths than *Seed*, *Voyage into the Unknown*, and *Victory Garden* (but not *my body - a Wunderkammer*). The average lexia lengths for *Uncle Roger*, *Twelve Blue*, and *The Jew's Daughter* are quite different from each other (51.47 words, 271.61 words, and 224.48 words respectively) so there does not appear to be a direct correlation between lexia length and average analepsis length. *Seed*, *Voyage into the Unknown*, and *Victory Garden* all have longer average lexia lengths but shorter average analepsis lengths than *Uncle Roger*, which also seems to suggest that there is not a direct correlation between lexia length and analepsis length. If one excludes *Uncle Roger*, the average analepsis lengths of the other hypertexts increase in almost but not quite the same order as their average lexia length, so it might be concluded that lexia length has some bearing on analepsis length and should be considered, but it is not definitive and is not the only factor. This leads us to the more literary explanation that these three hypertexts have the proportions of words in analepsis that they do because of a concern with memory and the past that is explored to a similar extent in each of them. This concern is expressed this time not with frequency but with time spent narrating the past. It is significant that these hypertexts spend a similar proportion of their words in the past to most of the modernist novels.

Sentence by sentence, *Uncle Roger*, *Twelve Blue*, and *The Jew's Daughter* seem to engage with the past in a similar way to *To the Lighthouse*, *The Sound and the Fury*, *Pointed Roofs*, and *Tender is the Night*. The main difference in this regard is that the hypertexts just have shorter spells in analepsis, moving in and out of the past more frequently. This in turn signals that the modernist novels tend to stay in analepsis for longer when they do employ the technique. That corresponds to the arguments we have already made with respect to frequency of analepsis tags. So, while at first it might have seemed that these figures disrupted the overall argument, they are actually in agreement with it. Analepsis in hypertext is not happening more than in modernism particularly, but in these texts it is happening to a similar extent, and that is

allowed by it happening more frequently and for shorter spells. Beyond a shared commitment to spending time narrating the past, it also indicates that the hypertexts are not able to commit as many words at a time to this effort. They are more narratively fragmented, they move around in time more. Their form makes them do this, but as we have seen this works to different extents in different hypertexts. The hypertext form has an influence on how a text uses analepsis, but it does not irrevocably decide that. There is room for variation. The fact that these three hypertexts use analepsis as similarly as they do to some of their modernist ancestors in terms of overall proportion shows that they are maybe not as different, chaotic, or fragmented as they could be. There are still some elements of narration that are more similar to the older texts, compared to *Seed* (although that follows modernism closely in other aspects of its narration than analepsis), and particularly *Voyage into the Unknown* or *my body - a Wunderkammer*. Overall, hypertexts might be moving on from the modernist style to an extreme degree, but this is to varying degrees. There is room for evolution as well as revolution.

There is also room for outliers. When measuring normalised frequency, the texts with the five highest frequencies were all hypertexts. With words in analepsis, two modernist novels have by far the highest proportion - *Three Lives*, with 76.06%, and *The House in Paris*, with 66.07%. The text with the next highest proportion of words in analepsis is *my body - a Wunderkammer*, with 38.67%. It is not surprising that those two modernist novels have the highest proportion of words in analepsis, even though they are among the lowest in terms of their frequencies of analepsis statistics; while they may not use analepsis very often, when they do it is for very long spells at a time. Most of *The House in Paris* is comprised of its middle section, which is entirely in analepsis. Meanwhile *Three Lives* begins each of its three sections in the present, briefly, before moving into the past and staying there for the vast majority of the narrative. What is surprising is that *Tender is the Night* does not have a similarly high proportion of words in analepsis, as it features a very similar narrative device to *The House in Paris*, with a long diversion into the past in its middle. Yet this novel only has 20.88% of its words in analepsis. It seems that while that middle section is the origin of the novel's story, setting into motion everything that happens, not much narrative time is actually spent there.

In addition, the book is so long (the longest text in the corpus, by a margin of over ten thousand words) that even though the section in the past is quite long, it is short compared to the overall length of the book. It is also shorter in absolute terms than the long analepsis in *The House in Paris* (17,832 words in Fitzgerald's novel compared to 44,465 in Bowen's), not just shorter

Title	Total Word Count	Analepsis			Prolepsis		
		Words in Analepsis	**No. of Ana Tags**	**Avg Ana Length**	**Words in Pro**	**No. of Pro Tags**	**Avg Pro Length**
Modernist novels							
Three Lives	85,643	65,142	32	2,036	62	5	12
The House in Paris	79,565	52,570	130	404	969	10	97
Tender is the Night	108,784	22,714	119	191	133	5	27
The Sound and the Fury	96,488	21,020	186	113	53,123	182	292
To the Lighthouse	70,060	9,304	140	66	0	0	N/A
Pointed Roofs	55,719	8,606	123	70	45	2	23
Hypertext fictions							
The Jew's Daughter	45,570	9,279	232	40	40	2	20
my body - a Wunderkammer	17,806	6,886	46	150	2,897	37	78
Victory Garden	98,182	5,801	200	29	49,775	425	117
Twelve Blue	23,087	5,344	120	44	1,418	12	118
Uncle Roger	12,918	3,182	83	38	9,538	204	47
Voyage Into the Unknown	7,562	659	31	21	160	3	53
Seed	37,686	264	11	24	138	4	35

Table 6.1: Word totals, tag totals, and averages for every text in the corpus, arranged in descending order by total words in analepsis.

Title	**Av Page/Lexia Length**	**Avg Ana as % of Avg Pag/Lx Length**	**Avg Pro as % of Avg Page/Lexia Length**
Three Lives	435	468%	3%
The House in Paris	301	134%	32%
Tender is the Night	239	80%	11%
Uncle Roger	51	74%	91%
my body - a Wunderkammer	434	34%	18%
Victory Garden	98	29%	119%
To the Lighthouse	255	26%	N/A
The Sound and the Fury	490	23%	60%
Voyage Into the Unknown	97	22%	55%
Pointed Roofs	326	21%	7%
The Jew's Daughter	224	18%	9%
Twelve Blue	272	16%	44%
Seed	161	15%	21%

Table 6.2: Average anachrony lengths proportional to the average page or lexia length of each text. For this table all the texts are grouped together, because it is entirely about proportions.

by proportion of the overall length of the novel. The result of this is that *Tender is the Night* dives into the past but does not give it as much attention as the other two novels mentioned here. For a text that is so concerned with psychoanalysis and the lingering effect of trauma from the past, it doesn't actually spend much narrative time directly exploring that trauma in its original context. Repression is a major part of *The House in Paris* both thematically and in its language, but it does actually spend a lot of its narrative time in the past, showing the reader how the present moment came to be. *Tender is the Night* instead quickly catches up with the present moment and presses on beyond it, much like its protagonist Dick Diver, trying to outrun his demons.

In the hierarchy of proportions of words in analepsis, instead of Fitzgerald's novel, Shelley Jackson's hypertext fiction is next. This is because it makes much use of analepsis, alongside narrative level changes. *my body - a Wunderkammer* features analepsis in more than half of its lexias. When it is used, it can be for sizeable proportions of a lexia, which leads to the overall

high proportion of usage. This text is thematically concerned with the past to a large extent, with the protagonist recounting many episodes from her childhood. It is perhaps surprising that the text does not have an even higher proportion of its words in analepsis, but this is explained by the fact that the protagonist also discusses the present, and the effect of past events upon her body in the present, and so the narrative often moves back and forth between separate narrative levels that occur in the past and the present, and those jarring transitions result in many words occurring in prolepsis, and not just analepsis. In this regard, this text is perhaps one of the most balanced in the corpus, with attention given to the past but also the present. We can see here that while the past and present can seem separate, the present carries the effects of the past.

Seed, *Voyage into the Unknown*, and *Victory Garden* are all outliers on the other end of the scale with respect to proportion of words in analepsis; they all have quite low statistics for this. The reasons for this are various, as are the relations to frequency. *Seed* has a very low frequency of analepsis tag usage as well as a low proportion of words in analepsis; it simply does not recognisably use analepsis very much, utilising parallel narrative levels instead. Its narrative is also more linear than most of the other hypertexts. *Voyage into the Unknown* can also be read in quite a linear fashion compared to most of the other hypertexts, although its frequency of analepsis is much higher than that of *Seed* despite the fact that its proportion of words in analepsis is quite low. This has to indicate that its instances of analepses tend to be very short. Indeed, it has the shortest average analepsis length of any of the texts in the corpus, at just 21.26 words. The text overall has relatively consistently short analepsis lengths, despite a structural feature that means its words are divided almost evenly between 76 short lexias and 2 quite long lexias. Despite that inconsistency in structure, the average analepsis length only changes from 18.25 words in the first 76 lexias to 24.46 words in the final 2 lexias. Relative to all the other texts these are both still very short averages. So, regardless of how long a lexia is in this text, its analepses remain short. This text consistently dives into the past frequently and briefly, creating a high degree of fragmentation. Most of the action is happening in the present for the narrators, and while frequent references are made to the past, not much time is spent there. This makes sense in terms of the story, because the lexias are often hastily-written diary entries, scribbled at the end of a day, looking back at its events. *Voyage into the Unknown* is highly temporally fragmented, and that is both a result of its form and the nature of the story it is telling; it is fitting that it should be this way. In contrast, different factors of scale

are at play in the statistics for *Victory Garden*; its proportion of words in analepsis, much like its normalised frequency of analepsis tags, is quite low because of the sheer length of this text overall. With so many words, and so many different kinds of lexias, many of which do not tell stories exactly but instead provide context and atmosphere, it is to be expected that analepsis is just one of many things that are happening in the text. Moulthrop's text had similar frequency statistics to the modernist novels, but is noticeably lower than them in terms of proportion of words. Indeed, *Victory Garden*'s average analepsis length is only 29.01 words, which is less than half the length of the shortest average analepsis length from the modernist novels. That is partially due to this text having short lexias, at 98.48 words on average. However, *Victory Garden* does have a high proportion of words in prolepsis, and its average prolepsis length is much higher, at 117.11 words; the shortness of the lexias did not curtail that. Although, much of the prolepsis content of *Victory Garden* is comprised of whole-lexia prolepses, caused by storylines continuing from one lexia to another, often forming strings of lexias. Even so, the analepses are short, and content may provide an explanation for that as much as form. *Victory Garden* is a text that is very much concerned with its own historical moment, the time of the Gulf War. It depicts that moment very evocatively, and does not spend as much time looking backwards as some of the other texts in this corpus. It does not engage with the past lives of its characters like the modernist novels do - instead rendering them richly in their present state - or with historical events, like *Voyage into the Unknown* does. *Victory Garden* is influenced by modernism in its fragmented style, but it is of its own time.

There is a similarly wide range of proportions of words in prolepsis in the texts. *The Sound and the Fury*, *Uncle Roger*, and *Victory Garden* all have quite high proportions of words in prolepsis; 55.06%, 73.84%, and 50.7% respectively. In all three cases, this is due to the structure of the texts, although those structures are informed by their content. *The Sound and the Fury* has a high proportion of prolepsis because its narration of the streams of consciousness of Benjy and Quentin require many transitions backwards and forwards in time, resulting in lots of words being spent narrating passages that are occurring later in time than the previously narrated event with which they are juxtaposed. *Uncle Roger* uses prolepsis to a similar extent but in a different way because of its form. Instead of spending many words in prolepsis in stream-of-consciousness narration, it spends many whole lexias in prolepsis, because they occur later in story time than the lexia from which they have been linked. That mechanic allows some discernible storylines to occur, which are sequential even if they are abruptly fragmented.

Victory Garden has essentially the same reason for its words-in-prolepsis statistics, but with even more storylines emerging over the course of the text and involving a variety of characters. Prolepsis, the sequential but necessarily discontinuous (because of the abruptness of the hyperlink process) jump from one piece of a story to the next, is the engine through which the most engaging stories in *Victory Garden* get told.

Not all of the hypertexts use so much prolepsis to drive their stories. *Twelve Blue* and *my body - a Wunderkammer* have much lower proportions of words in prolepsis than *Uncle Roger* and *Victory Garden*. Jackson's text is 16.27% words in prolepsis, while Joyce's is only 6.14%. These texts do not have sequential storylines from lexia to lexia like some of the other hypertexts do. *Twelve Blue* has storylines, but the lexias that comprise them tend to be separated from each other and not linked directly from one to the other; the plots build up in the reader's mind rather than being seen in successive lexias. *my body - a Wunderkammer* does not have storylines over multiple lexias at all. Every lexia is told by the same narrator, but they each tell their own discrete narratives, or, as we have stated already, often two separate narratives within one lexia. Those narrative transitions within lexias feature some returns to the relative future after a segment in the past, but this does not always happen. Clearly it does not happen enough to match the kinds of proportions seen in Malloy and Moulthrop's texts. Jackson's text is more concerned with diving into the past than returning from it.

By proportion, barely any words are spent in prolepsis in *To the Lighthouse*, *Pointed Roofs*, *The House in Paris*, *Tender is the Night*, *Three Lives*, *Seed*, *Voyage into the Unknown*, or *The Jew's Daughter*. None of these texts has more than 2.2% of its words in prolepsis. The first five of the texts listed above - the modernist novels, - while very concerned with the past, do not project into the future very much. Apart from brief flashes, they do not attempt to detail much about the events that will happen later in the lives of their characters. Although, the rarity of those flashes makes some of them more special, such as when we receive hints in *The House in Paris* that Henrietta would come to understand the events of the novel and their context much better as an adult. Structurally, these novels, of course, do not have the fragmentation and successive links that create so much of the prolepsis in the hypertexts. One wonders then why the three hypertexts, *Seed*, *Voyage into the Unknown*, and *The Jew's Daughter* have figures closer to these modernist novels than to the other hypertexts, to which they are closer in form. The answer is that they are just different enough from the other hypertexts in terms of form, and each in a different way. As has been stated before, *Seed* does not engage with

temporal disruptions in quite the same way as the other texts, with parallel narratives being its primary device. The parallel narratives within lexias do not feature the kinds of specific details that allow one to ascertain which is occurring later in time. Similarly, while the text broadly progresses chronologically through a summer, it is usually not possible to definitively identify whether a given individual lexia is occurring later in story time than another one. Each lexia is a moment, a snapshot of a particular teenage experience that collectively creates a whole. Analepsis and prolepsis do not really apply to this kind of evocation. *Voyage into the Unknown*, while definitively chronological, does not feature direct links from lexia to lexia; one must instead click into each lexia individually from the overall screen. As a result, this text does not have the same fragmented succession seen in other hypertext storylines, so it does not create whole-lexia prolepses. In that respect it is different, and one could say even more fragmented, than most of the other hypertexts. *The Jew's Daughter* is also quite different, with its slowly evolving single page. The technique of this text uses analepsis to an extent similar to modernism, with memories occurring to the narrators, but again similarly to modernism it does not project into the future much, and it structurally does not have separate lexia with links to create the kind of whole-lexia prolepses generated by storylines in other hypertexts. So, these outliers having barely any words in prolepsis is largely structural and results from their various forms, but those effects are ultimately driven by these texts not being as interested as some of the other texts in the corpus in sharp transitions forwards in time, so much as they are in transitions backwards. In these texts, the past reigns over the future.

6.4 Further detail on individual texts

6.4.1 Modernist novels

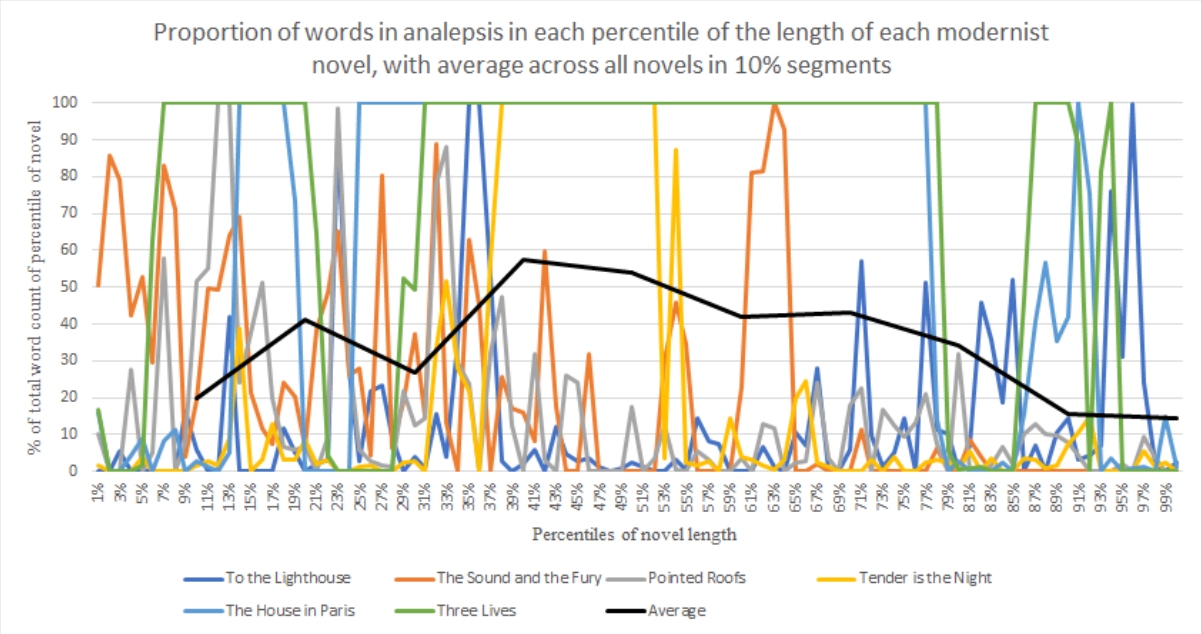

Figure 6.4: Each novel is a different length, so instead of using page numbers we can represent the distribution of words in analepsis over the length of each novel by breaking down each novel into segments of 1 percent. The average here uses 10% segments for a smoother line.

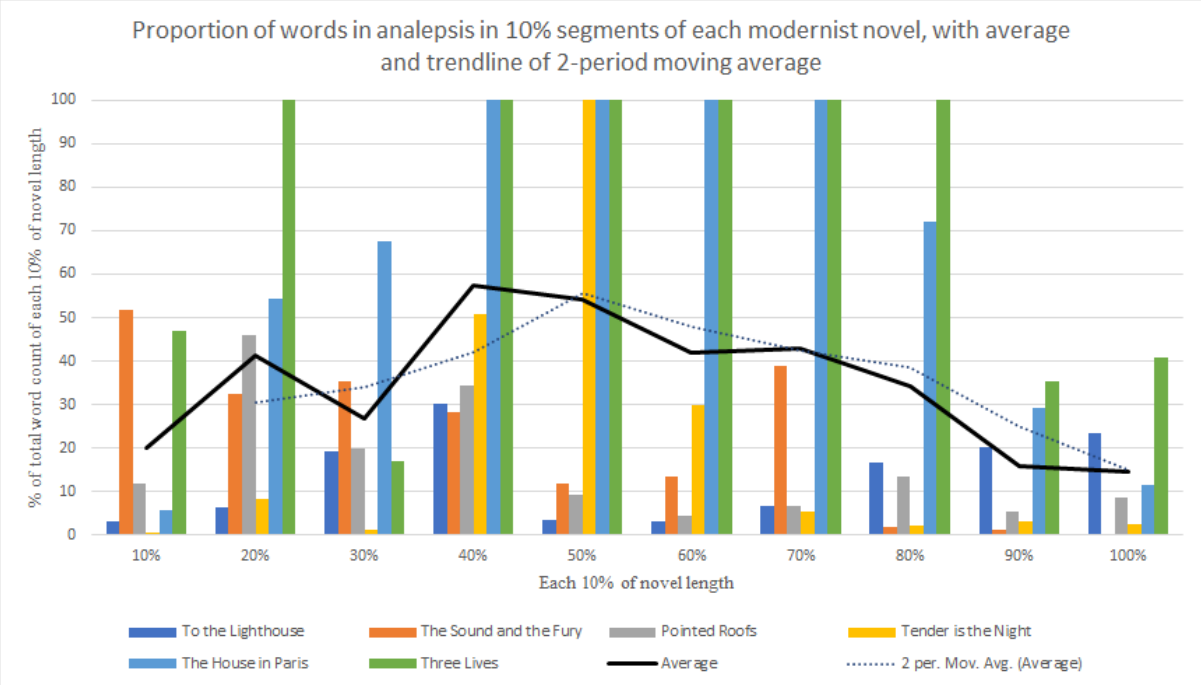

Figure 6.5: The dashed trendline is calculated using 2-point moving average, which is an average that begins at the second point on the graph and then moves through the data points, continuing to average the past two data points, adapting as it goes along, creating a smoothed line.

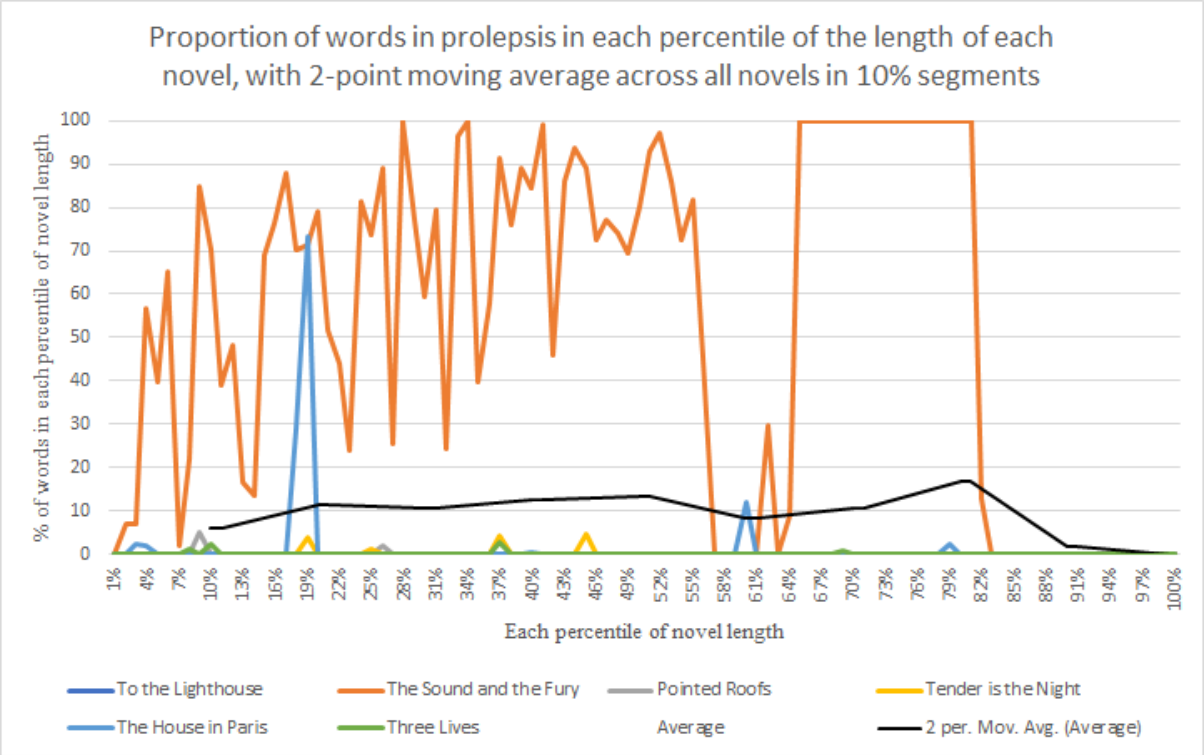

Figure 6.6: This graph is the equivalent of Figure 6.4, but for prolepsis rather than analepsis. It is immediately apparent that, in general, a much lower proportion of the modernist novels' words are spent in prolepsis. However, the technique is very significant in *The Sound and the Fury*.

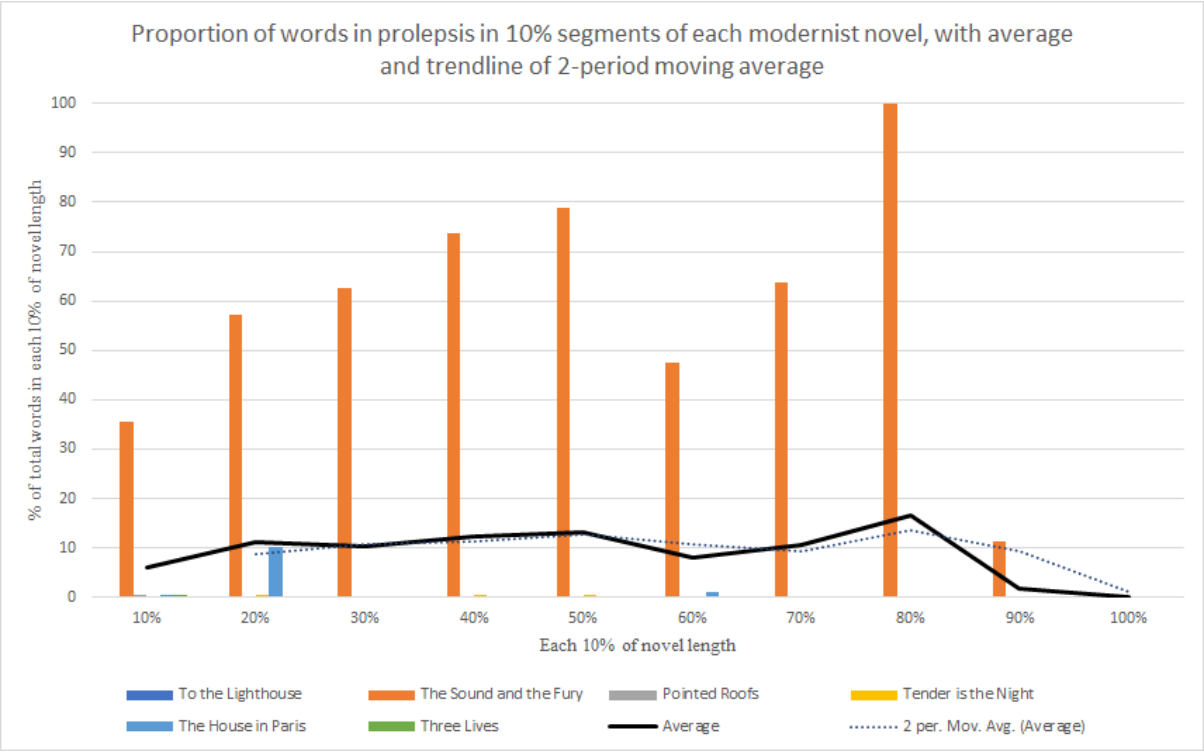

Figure 6.7: Similarly, this graph is the equivalent of Figure 6.5 but for prolepsis.

The Sound and the Fury

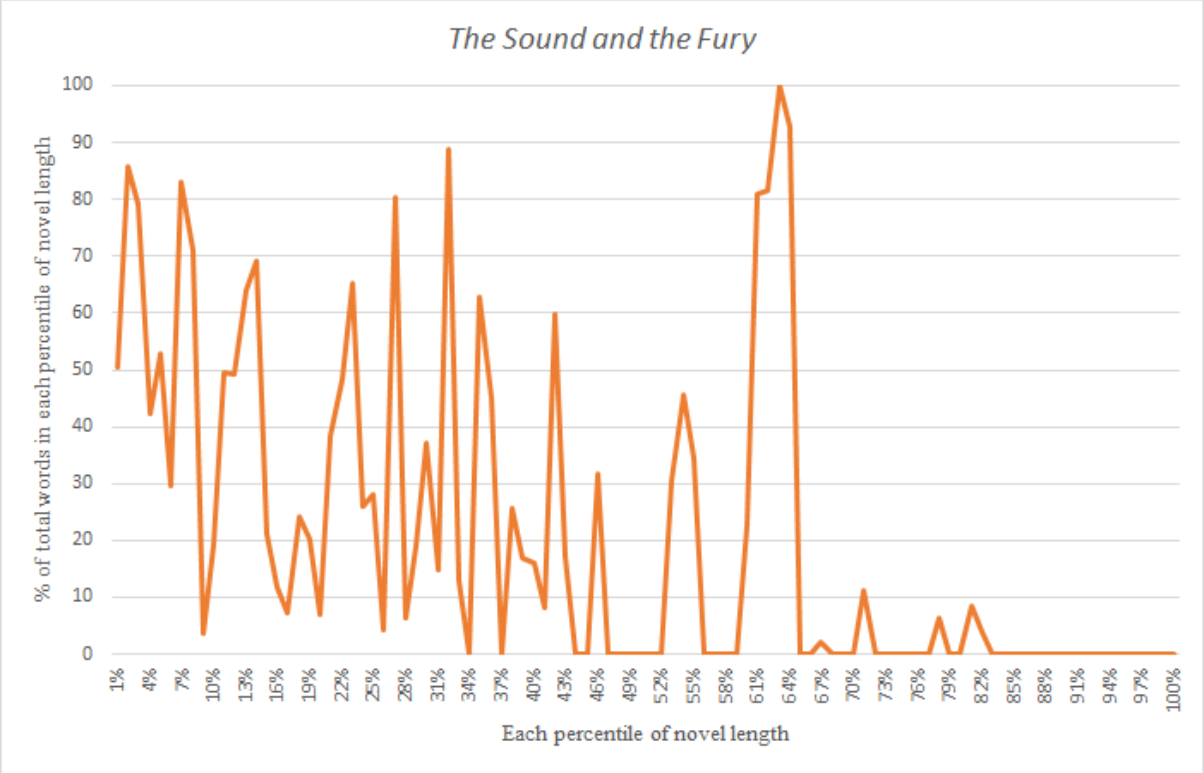

Figure 6.8: Proportion of words spent in analepsis over the percentiles of this novel. There is a downward trend, with hardly any usage of analepsis in the novel's final third.

The Sound and the Fury jumps backwards and forwards through the memories of the narrators of its first and second sections throughout their stream-of-consciousness narratives. Past events replay in the minds of these characters; they fixate on specific memories whether they intend to or not, and this affects their present actions. The past also affects the actions of the protagonist of the third section, but we visit the past less frequently in narration, with more time devoted to the frenetic present. The fourth section hardly uses analepsis at all, but the section carries such meaning because the reader already has the context of reading the previous three sections and knowing the history of the families at the centre of the novel. In Richardson's *Pointed Roofs*, there is a visible decrease in the number of words contained within analepsis tags from the beginning of the novel to the end. In Faulkner's *The Sound and the Fury*, a similar trend is evident both over the course of the entire novel, and within the first two sections of the novel, the ones told from Benjy and Quentin's perspectives. Those two sections contain most of the words in analepsis in the novel. In each section, there is more analepsis at the beginning than at the end, and as such the graph in Figure 6.8 shows a downward trend. Contrastingly, in

the third section of the novel, Jason's section, there is not such a clear pattern. Here analepsis is used more sporadically, usually only when Jason's frantic thoughts happen to lead him into memory. The final section, from a more omniscient perspective but focused on Dilsey, contains almost no analepsis; there happens to be a short reference to the past at the very beginning of the section, but from then on it is focused on the present. The reasons for all four of these patterns deserve some attention, and may help us to analyse the novel, both as a whole and in its context in modernist literature (and perhaps even as a precursor to texts like *Twelve Blue*, *Uncle Roger*, and *Victory Garden*).

Benjy's section begins on 7 April 1928 and is made up of fragments of many scenes. The vast majority of those scenes occur at various points in the thirty years that precede 1928. 7 April 1928 is returned to frequently over the course of the section, and it is the latest date on which action occurs in Benjy's section. Its events trigger Benjy's memories, which bring the narrative back and forth through his life. This movement back and forth through memory is manifested in many instances of analepsis and prolepsis; after the first few paragraphs, the whole section is told using analepsis and prolepsis. As ever with this annotation scheme, analepsis and prolepsis are defined as being spans of text that take place after an immediate transition in story time either backwards or forwards, and take place either before or after the part of the story that has just been left behind with that transition. In other words, each analepsis or prolepsis is an analepsis or prolepsis relative to the part of the narrative that precedes it. So, this section of Faulkner's novel can still have many instances of prolepsis despite the fact that it begins on 7 April 1928 and everything that occurs in it happens either before or on that date. The narrative is still frequently moving backwards and forwards in story time.

After the first nine paragraphs of the section, we are presented with fragments from much earlier in Benjy's life, when he was a small child. Events from childhood hold a lot of weight over Benjy's present, and he recalls the past frequently. The action of that recall and the narrating of it to the narratee - and in particular Benjy's agency in this act of narration - are discussed in Chapter 4 of this thesis. For now we are only concerned with the temporal aspect of the narration. Early in this section, the narrative jumps back and forth between the present, where Luster is taking Benjy for a walk; some scenes from when Benjy was a child and went walking with Caddy at Christmas time, after Caddy had been advised against this by Mother; a trip with T.P. and Mother to the cemetery some years after that; and the delivery of a letter to Mrs. Patterson when Benjy was a child. These scenes are interspersed with brief instances

of prolepsis when the narrative returns to the present day for a few sentences at a time. Those prolepses keep most of the other passages in this part of the chapter classed as analepsis because there is usually a quick prolepsis before changing to another scene. We don't get a long analepsis until page 8. All of these points in time involve Benjy either taking a journey by foot or by carriage, or being the object of a planned journey. The novel begins with Benjy walking, and an emphasis on movement is maintained, with Benjy encountering different people and accessing different parts of the area near his home, and both those people and those places act as triggers for further memories and transitions in the narrative.

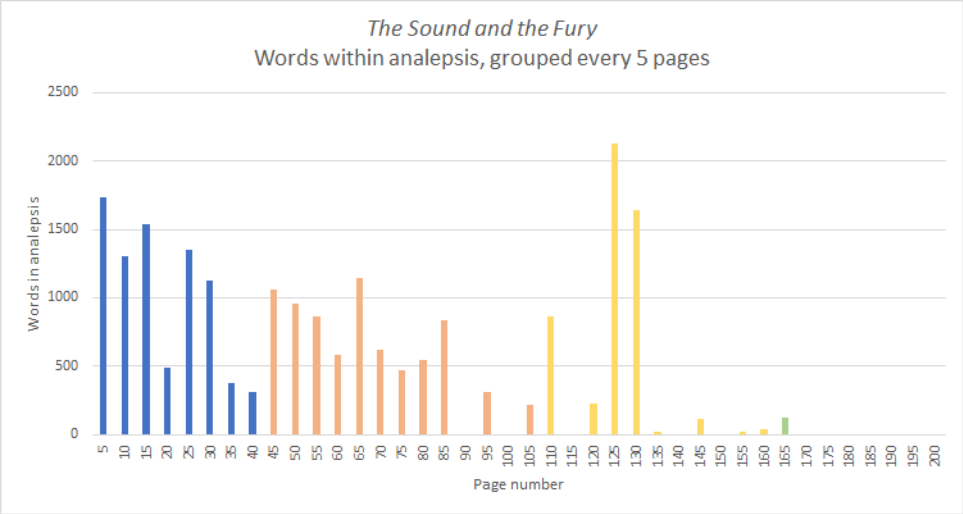

Figure 6.9: This graph provides a different perspective than Figure 6.8. It shows the divisions of the different sections of the novel, and shows words in analepsis grouped every 5 pages, rather than percentages of words in analepsis for every percentile of the novel.

When we examine the words in analepsis in five-page groups over the course of the novel as a whole (Figure 6.9), there are visible dips in the numbers in Benjy's section around pages 20, 35, and 40. When the graph of every page in Benjy's section is consulted (Figure 6.10), it shows a more nuanced picture. The dips in the pages preceding 20 and 35 are evident, but the dip near page 40 seems less pronounced relative to the pages around it. There is also a notable decline in words in analepsis on pages 8 and 9, and page 12. These drops can all be explained by what is happening with the narrative. On pages 8 and 9, the narrative returns to the events of 7 April 1928 for a longer span of text than it has spent there before, continuing with Luster bringing Benjy on a walk to the branch. As such, these pages are contained in prolepsis tags. This is exemplary of the structure of Benjy's section; when its words are not in analepsis, they are almost always in prolepsis. Figure 6.11 shows compensatory increases in words in prolepsis

any time the words in analepsis dip. Benjy's section is constantly jumping around in time, it is never still.

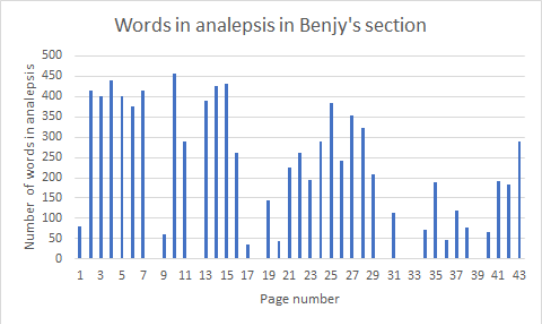

Figure 6.10: Figures 6.10 and 6.11 show more detail from the first section of *The Sound and the Fury*. Figure 6.10 shows the numbers of words in analepsis for every page in the novel's first section.

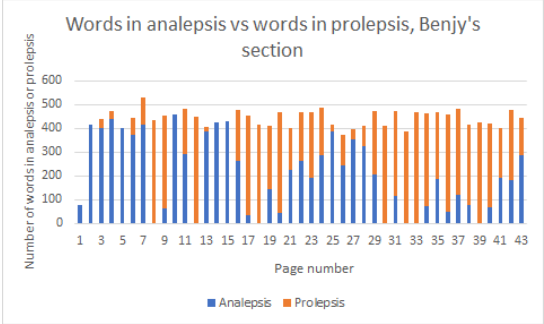

Figure 6.11: Figure 6.11 shows that same data but adds the corresponding data for words in prolepsis. This graph suggests that most of the time Benjy's section is either occurring in analepsis or prolepsis; is it hardly ever in neither.

The dip around page 20 is mostly made up of a scene with Roskus and Dilsey discussing whether the Compson house is cursed with bad luck, and a different scene with Benjy and Caddy's daughter Quentin playing in the branch. Both of these scenes occur later in time than the journeys that had been described before them, making them instances of prolepsis. After this, for about ten pages there is much switching between analepsis and prolepsis but there are more words spent in analepsis. Then, the trends near pages 35 and 40 are really part of a larger trend of decreased words in analepsis and increased words in prolepsis from page 30 onwards to the end of the section, at page 43. Indeed, from page 30 onwards, only 22% of the words are in analepsis while 78% are in prolepsis, but before page 30, 59% of the words had been in analepsis and 38% were in prolepsis. There is a clear transition in the structure of the narrative three-quarters of the way through this section; prolepsis starts to dominate the word count whereas before it had been in the minority. The chapter is leaving the past behind and moving forwards into the present. These pages feature long spells on 7 April 1928, with short spells of analepsis describing the events around Benjy's name change. Despite this increased focus on the present, as Benjy follows the golfers and is upset by their use of the word 'caddy,' which triggers bad memories for him, the section then ends in one of its earliest possible chronological times, when Dilsey is putting Benjy and all his siblings to bed as children. That memory is triggered by the action at the very end of the present day, when Benjy is also being put to bed. But the scene with Benjy being upset by the golfers is the culmination of the tension that had been building

in the narrative of the present day, and we can now understand why Benjy is so upset because we have had many analepses detailing traumatic events in the past, focused around Caddy, which cause Benjy distress now. These moves into prolepsis are a culmination of both narrative momentum and thematic understanding; the knowledge that the reader has developed about the bad things that have happened in the Compson household, the deaths and estrangements, inform the reader's interpretation of Benjy's reactions in the present. By the time we see him being upset, we understand why he would be. There are further thematic possibilities for the way the chapter has been structured generally, beginning in the present and transitioning into the past for long spells and then returning to the present at a moment of upset. The use of analepsis and prolepsis, the slow revealing of traumatic events, gives us an illustration of Benjy's psyche, where things are buried but come up from the deep to trouble him. The structure also mirrors the way the Compsons live their lives - they try to be in the present and continue as if things are normal, but the past permeates everything, and they cannot escape it. The past is hidden, and they don't want to face it at first, but it finds its way through. These could all be reasons for the nature of narrative time in Benjy's section.

In Quentin's section, the pattern is similar in that words in analepsis decrease markedly towards the end of the chapter; comparing this with Benjy's section might help to shed light on the narrative structures of both sections, and the reasons for those structures. Quentin's section begins on page 44 and lasts until page 110. From page 44 to 85, many words and large proportions of pages are spent in analepsis. From page 85 to 90, there is a long spell in the present, with just a few short interruptions, and because this all follows a scene from the past, this spell in the present is prolepsis. Several pages are spent describing Quentin meeting a young girl on his walk and getting in trouble with the local constable for this. The narrative had not previously spent so long in the present until this point. In that sense, there is a structural similarity with Benjy's section, with the longest pieces of prolepsis coming towards the end of the section, after many words have already been spent in frequent trips to the past. Then something changes. Some short bursts of analepsis from multiple time periods interrupt the narration of the present, as something about Gerald's attitude (we find out later that he was bragging about his prowess with women) triggers Quentin's mind to return to painful memories. Then the past takes over for long spells. There is a slight jump forwards in time from a few sentences on page 92 to the long passage that follows, making that long passage count as prolepsis, even though it takes place before the present moment. There is a further long prolepsis beginning on page 98 that

also takes place before the present but is counted as prolepsis for the same reason. These long prolepses in the past use stream-of-consciousness narration, abandoning the style that had been used earlier in Quentin's section, which had mostly featured correctly-structured sentences with occasional non-grammatical interruptions of analepsis. For these prolepses in the past the style of the interruption has become the whole style; there is no punctuation or capitalisation, with many line breaks used instead. This is now Quentin's mind whirling as the past takes over his thoughts. These passages describe Quentin's jealousy of the man Caddy was seeing, Quentin's half-hearted attempt at a murder-suicide with Caddy, him walking alone near the branch, and his attempted assault of Caddy's lover. As all of this is being narrated, some words in particular are repeated many times: shadow, time, Caddy, love, Benjy. Quentin's mind is moving fast but getting stuck on certain words. The character and the narration are frantic, although we spend long passages in one time, which is unusual for Quentin's section. After this there is another prolepsis which returns us to the present moment, to discover that Quentin has tried to fight Gerald, and received a beating as a result. He is told that he has yelled "did you ever have a sister? Did you" (Faulkner 103), which were the same words he had said to Caddy's lover. The past and present have become confused for Quentin. Earlier in his section his mind had flitted back and forth between past and present; when he tried to fight Gerald, the past was all he could think of. It blinded him, and us as readers, because as we only get narration of the past from Quentin, we and he are both unconscious of the present act of violence, as if Quentin has been in a kind of fugue state in which the past has taken over. The fact that this is a long spell of narration that is not set in the present underlines that something different is happening in the narration, and thus in Quentin's mind, than at earlier points in his section. As Quentin recovers from the beating and leaves his friends behind, his narration returns to a grammatical style, mostly in the present with a few childhood memories intruding: sense memories of honeysuckle, wisteria, playing in the rain as children, twilight, and Benjy's name change. Shortly before the time that Quentin has assigned for his death, his mind spirals again into a long paragraph of stream of consciousness analepsis in which he remembers the conversation with his father in which he had claimed to have committed incest. For the last paragraph his mind and the narration return to a clearer, grammatical style as Quentin makes the final logistical preparations for his death.

The conclusion of this comparison of what is happening in the story with how it is being relayed in narrative time is that there appears to be a strategy in place in both Quentin and

Benjy's sections of providing revelatory information to the reader towards the end of a section by changing the pattern of narrative time transitions that had been established earlier in that section. In this case finally we are getting a clear realisation of the central trauma for Quentin, the last straw that has led him to his death. Towards the end of Benjy's section the prolepses are mostly to the present, while for Quentin the prolepses spend significant amounts of time in the past, but they are both using time transitions in a different way and in different quantities towards the ends of their sections than they had earlier in their sections. They correlate not just in the raw numbers but in a narrative strategy of elucidating meaning and providing a climax at the end of a section.

The use of narrative time transitions to provide clarity on the story at the end of a character's section is what Benjy and Quentin's sections have in common, but the other two sections in the novel do not share this. Jason's section uses analepsis but in a much more conventional way, it doesn't have the establishment and breaking of patterns that Benjy and Quentin's sections have. The final section, focalised by Dilsey but narrated by a third party, as stated before has only one short analepsis on its first page and then takes place entirely in the present. Incidentally it has become clear after all of this that Caddy is the central character of the novel, her arc is the one that dictates most of the other events in the novel and has effected the lives of her brothers in different ways and unintentionally but powerfully in each case, and yet she is the only one of her siblings that does not get to narrate a section of the novel.

Pointed Roofs

Dorothy Richardson's *Pointed Roofs* also has far fewer words in analepsis near its end compared to near its beginning (see Figure 6.12). Otherwise, this novel is quite different from Faulkner's in both structure and style of narration. Instead of having four sections with a different narrator for each, *Pointed Roofs* has one narrator for the whole novel, and it has chapters but they are more conventionally related, proceeding in mostly chronological sequence from beginning to end, and they do not change style of narration. Richardson's novel is attempting something quite different than Faulkner's; it is a long, deep and intense study of one character's psyche and its evolution, told only from her perspective, rather than using a variety of voices to tell the story of a family. *Pointed Roofs* is entirely focalised by the character of Miriam Henderson, and narrated by an external narrator who sticks very closely to Miriam's thoughts, feelings,

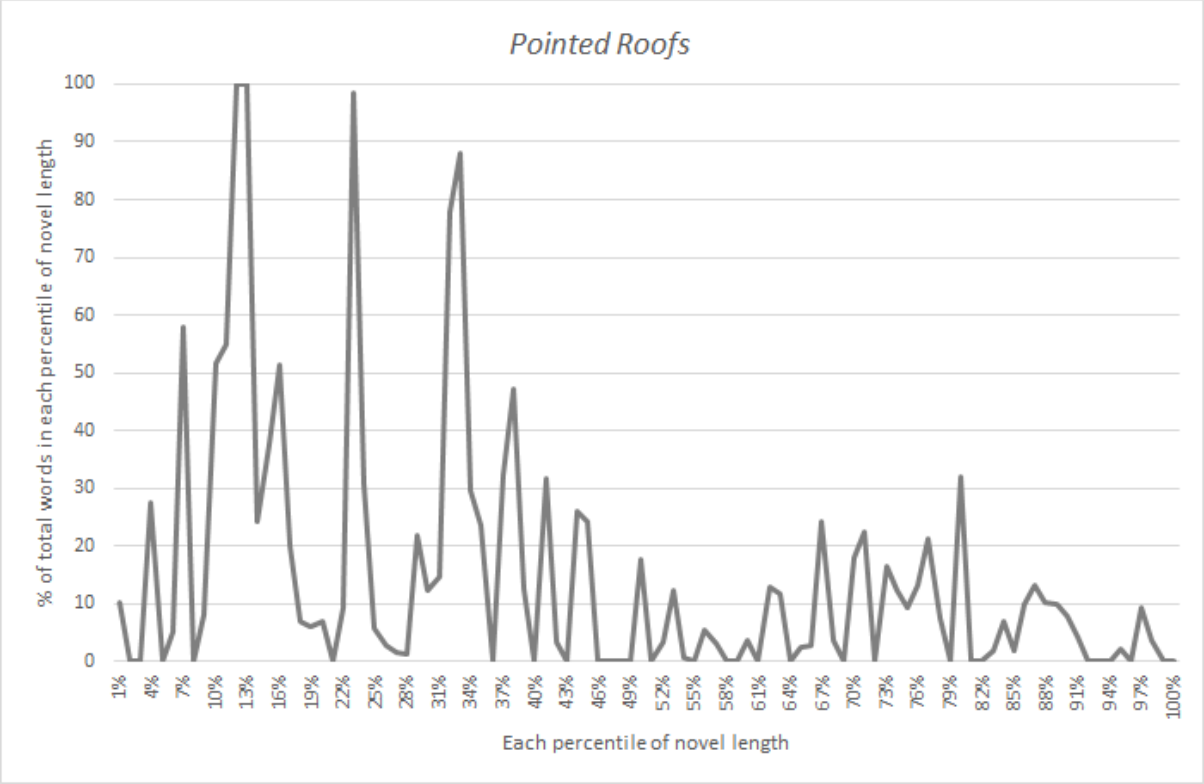

Figure 6.12: Here we also see a decrease in the proportion of words spent in analepsis in later percentiles of the novel.

and opinions. The analepsis in this novel is driven by Miriam's memories. *Pointed Roofs* uses memory as part of a structural device in its early chapters, which tend to begin at the end of a day and then flash back to recount that day's events. Miriam is processing the day at its end, when she is alone, and this practice is mimicked by the narration. As the novel progresses, this technique is used less frequently, with the narrative proceeding more linearly through the present. Less retroactive processing is now required, as Miriam has gained confidence in her surroundings. In the sense that analepses tend to be memories, this novel is similar to *The Sound and the Fury*, but the presence of the third-party narrator makes the diversions into memory much more constructed, methodical, and intentional-seeming than the involuntary flashes of analepsis that happen in Benjy and Quentin's sections. The style of narration in *Pointed Roofs* is not as closely tied to the character as Jason's section in *The Sound and the Fury* (yet displays much more self-knowledge by the character of Miriam than Jason is capable of having), and not as distant as the narration in *The Sound and the Fury*'s final section. Its use of analepsis for memory is quite different to the use of analepsis for memory in Faulkner's novel. It is Miriam's self-aware mind working through her experiences, mediated to us by the narrator.

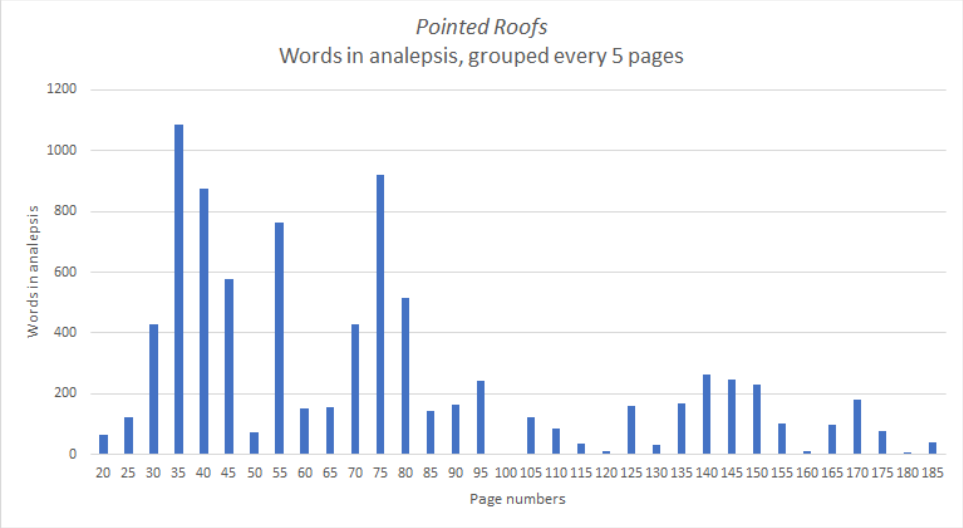

Figure 6.13: This graph shows the total numbers of words spent in analepsis in five-page spans, rather than the proportion of words in analepsis.

Yet, as different as the two novels are in narrative style and the function of memory, they do have some similarities in their analepsis data. The first half of *Pointed Roofs* has 6,721 words in analepsis, while the second half has only 1,885. *The Sound and the Fury* has a similarly stark difference in proportion, with 15,623 words in analepsis in its first half, and 5,397 in its second half. In other words, the first half of *Pointed Roofs* has more than three times as many words in analepsis as the second half, and the first half of *The Sound and the Fury* has almost three times as many words in analepsis as its second half. Proportionally, words in analepsis make up 15% of the total word count of *Pointed Roofs*, but they make up 24% of the words in just the first half, and only 7% of the words in the second half. Similarly, words in analepsis comprise 22% of the total words in *The Sound and the Fury*, but in the first half the proportion rises to 34% of the words, while in the second half it is only 11%. So, with both novels, the first half has a greater-than-average proportion of words in analepsis (in each case a rise in proportion of just over 50%) while the second half has about half the average proportion. This leads one to question why this data is so similar if the novels are so different in narrative style and structure. For the novels as a whole, there may not be a clear reason. However, comparisons might be made in terms of how narrative time structure reflects story content between *Pointed Roofs* as a whole and the individual sections of *The Sound and the Fury*. In Benjy's section, overall 47% of the words are in analepsis. In the first half of that section, 56% of the words are in analepsis, while in the second half that proportion falls to 37%. In Quentin's section, overall 24% of the words are in analepsis, with that proportion rising to 32% in just its first half and falling to

15% in its second half. For comparison, the numbers in Jason's section are wildly different from those in Benjy's and Quentin's sections. In that section, 16% of the words are in analepsis, but most of those occur in one sequence that lasts several pages, early in the section. In the first half of Jason's section, 29% of words are in analepsis, but in the second half only 2% are in analepsis. This narrative is not functioning in a way that is similar to that of Benjy or Quentin. The numbers of words in analepsis in the final section are so low as to be not comparable in this context; that section does not look back, it lives in the present moment.

In the second half of *Pointed Roofs*, with its low numbers of words in analepsis generally, the largest spikes occur in the five-page groups leading up to page 140 and page 170. There are no long pieces of analepsis; there are merely a few short descriptions of memories. In the pages before 140, Fraulein sends the students upstairs to lie down on a hot afternoon, and this leads Miriam to remember times in the past when she has been ill and bedridden. Other events and thoughts in the present trigger similarly short memories of home. Then the narrative returns to the present. These several short diversions into memory - a handful of sentences at a time - add up to create the spike in words in analepsis seen in the graph. The pages leading up to page 170 also feature short, momentary memories of things of which the present reminds Miriam: a phrase her mother had said; men she had seen in the town in Germany; a walk some time before; Fraulein's demeanour earlier in the day, remembered late at night. So, it would seem that these analepses that create the small rises in the graph in the second half of *Pointed Roofs* are generally short instances and easily explainable as being triggered by current events in the story. They are not long diversions into the past, or ones that are particularly significant to the story or its climax (Miriam leaving the school but not going home to England, and instead forging her own career path). This focus on the present with only short references to the past is quite different from the first half of the novel, which had featured much longer analepses in which Miriam often spends pages at a time remembering scenes from her life with her family in England, or processing and recounting events from earlier in the day or week. This change indicates that Miriam is no longer overwhelmed by her surroundings, she is able to thrive, make plans for the future and be confident.

A possible thematic explanation for the comparable patterns in *Pointed Roofs* and each of the first two sections of *The Sound and the Fury* is the evolution of a character arc requiring new narrative forms as the novel or section goes on. Another explanation is momentum - changing the play of narrative time at the end of a piece to create a propulsive climax (even *Pointed Roofs*,

in which plot is not the main focus, has a climax in which Miriam decides how to spend her summer and end her time at the school in Germany). Another related reason is the narrative technique reflecting an epiphany, a change or realisation (or lack of one) that the focaliser and/or narratee experiences at the climax of a story. In Benjy's section of *The Sound and the Fury*, the actions of other characters in the present keep Benjy's mind in the present for a time and take him to an an emotional climax, before he retreats into the calming memory of childhood unity with his siblings. For Quentin, characters around him remind him of significant moments in his past, into which his mind then spirals uncontrollably for long spells rather than the brief flashes seen earlier in his section. He returns to the present, before taking us into analepsis again as he recalls the conversation with his father which has so lodged in his mind, before finally returning to the present. These long switches, and their corresponding departure from grammatical logic, are his epiphany; the taking over of the memory, the inability of his mind to hold back the flood of analepsis. Whereas for Miriam the climax is leaving behind the memories that have occupied her mind for the early part of the novel, and instead living in the present moment and planning for the future.

However, it is important to remember that the difference between Richardson's whole novel and Faulkner's individual sections is that within Benjy and Quentin's sections, when there are fewer words in analepsis, there are more words in prolepsis. In *Pointed Roofs* there is almost no prolepsis. When words are not in analepsis, they are unlikely to be part of prolepsis; they are simply happening in the present. In *The Sound and the Fury* as a whole, there isn't much prolepsis in the second half of the novel. So in that sense it is similar to *Pointed Roofs*, but the reason for the lack of prolepsis is similar even if the narrative style is completely different. In *Pointed Roofs* prolepsis is not needed because the story is largely occurring in the present, and that is also the case in Jason's section and the final section of *The Sound and the Fury*, even though the way that they tell their stories is quite different.

To the Lighthouse

To the Lighthouse has a different kind of distribution of words in analepsis than either *Pointed Roofs* or *The Sound and the Fury*, in that it has an increase in words in analepsis towards the end of the novel. As can be seen in Figure 6.14, the first half of the novel has 4,370 words in analepsis while the second half has 4,934. This increase is not great but it is quite different

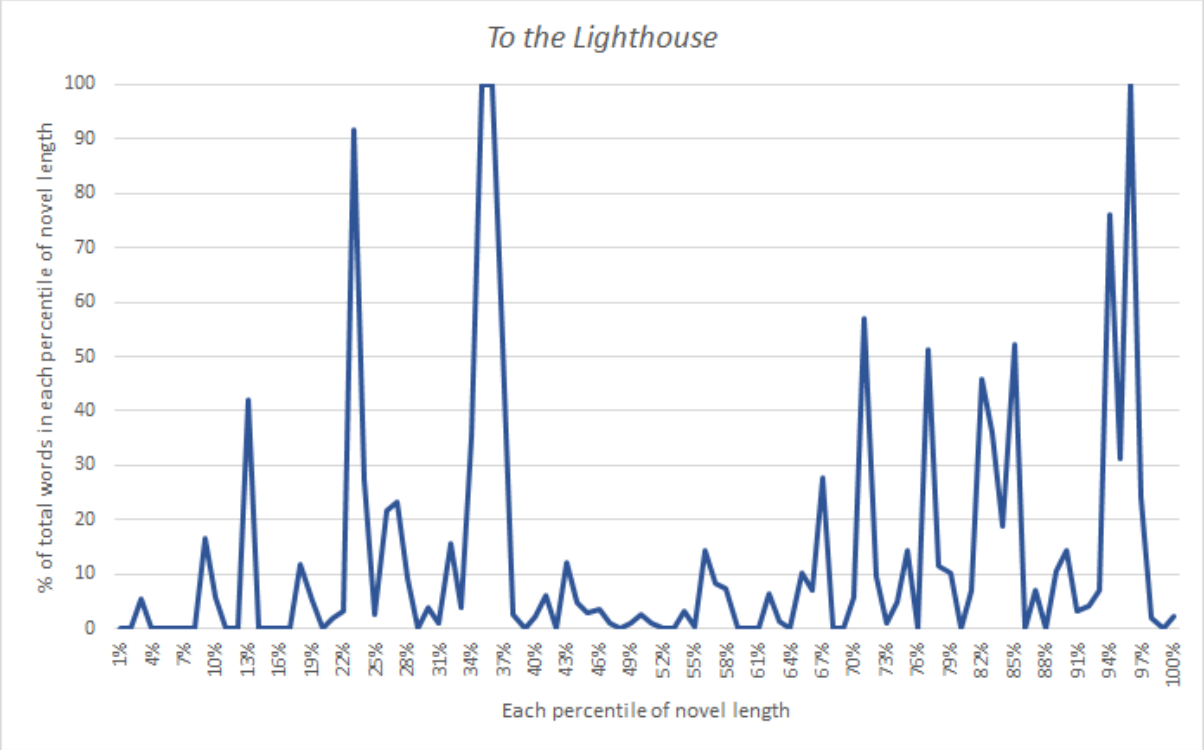

Figure 6.14: Woolf's novel shows a different pattern in the distribution of words in analepsis than the previous two novels.

from the large decreases seen in the previous two novels discussed. To further compare the two halves of *To the Lighthouse*, the first half of the novel has larger but fewer spikes of large amounts of words in analepsis in five-page spans, while the end of the novel has more consistent, smaller large groupings of such words. If one removes the long analepsis near page 100 which recounts the young people's walk on the beach, the first half of the novel would have only 2,464 words in analepsis, substantially fewer than the second half. That significant increase shows the importance of analepsis as a mechanism in Woolf's novel, particularly as it moves towards its end. In contrast to *Pointed Roofs* and in particular *The Sound and the Fury*, Woolf's novel does not actually feature any prolepsis; it is driven by looking back, not forward.

That looking towards the past, increasing towards the end of the novel, happens for a reason. As with the other novels discussed so far, the analepses are largely memories that characters experience, memories triggered by things happening in the present which remind characters of events from the past. *To the Lighthouse* engages with short-term memories in its first section, with characters remembering recent events and conversations; the little daily recollections that affect our interactions with each other. Its highly experimental middle section eschews analepsis for its more abstract passages but then returns to using memories and the subjectivity of

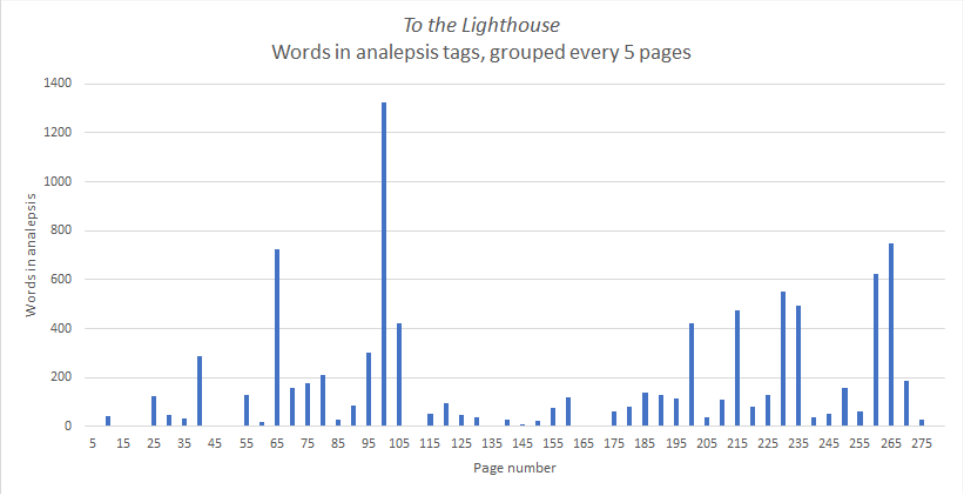

Figure 6.15: This graph shows the total numbers of words spent in analepsis in five-page spans, rather than the proportion of words in analepsis.

characters towards its end, to gradually transition back towards the narration style of the rest of the novel. The third section makes much use of long-term memories as the characters remember events from around the time of the first section, ten years before, and the people who are no longer with them. When one investigates the largest amounts of analepsis per five-page spans in Figure 6.15, by going back to the corresponding points in the novel and seeing what is happening in the story to cause those analepses, some similarities can be found. The memories that the characters experience are usually of specific people; an event or thought in the present makes the focalising character remember a past event involving a particular person. Most often, the person being remembered is Mrs. Ramsay, in both the first and the second half of the novel. We can see this happening from early in the novel, at the spike leading up to page 40. Here we first see Mrs. Ramsay, in the present, thinking about how other people focus too much on her looks. Immediately after this there is an analepsis of William Bankes remembering a phone call with Mrs. Ramsay, when he had complimented her over the phone and imagined her beauty even though she was not present, and then afterwards thought about how she was unaware of her beauty and how people saw her (which we know, from what we've just read, is totally untrue). In this case the analepsis and switch of perspective serves the function of confirming what Mrs. Ramsay had been thinking. This trip to the past has added further depth and meaning to the present moment.

The spike in words in analepsis leading up to page 65 features Lily Briscoe remembering Charles Tansley saying that women can't paint or write, and then also another insult by him from a

recent evening. Both of these flashes are brought on by Lily's dissatisfaction with her painting in the present. In this same five-page spell, Lily then remembers an encouraging and comforting encounter when Mrs Ramsay visited Lily's room late one night. During this typical late-night visit, Mrs. Ramsay shows her values through conversation, and the scene is exemplary of her demeanour and effect on people. Lily sees her friend more deeply than William had, and remembering her is relaxing and inspiring, even while Mrs. Ramsay is still alive. Shortly after this, around page 80, there are a couple of short analepses from Mrs. Ramsay herself in which she remembers recent times with her small children, amongst present considerations about marriage, children, happiness, and life.

For the spike near page 95, there is frequent switching between narration of the present and of the past as William Bankes and Lily Briscoe talk about each of their past trips to Europe while walking together in the present; these memories are relayed to us indirectly rather than in direct speech, making them analepsis. At the end of that passage, Lily sees Mrs. Ramsay and recalls the same late-night conversation that she had remembered around page 65. This past event continues to resonate for her in the present. It is enough for her to see Mrs. Ramsay in front of her to trigger a recollection of their conversation in the past. In this case again the analepsis is triggered by something in the present, and Mrs. Ramsay is again the focus of it. Much later in the novel, Lily will imagine Mrs. Ramsay to be with her (Woolf 223), creating a more poignant instance of analepsis, but for now she is present, and the memories characters experience of her are more recent.

Following this, around pages 100 and 105, is the long analepsis involving Nancy, Andrew, Paul, Minta, and the rest of the party that went for a walk at the beach. This analepsis is unusual for this novel not only in its length but in the fact that it is not triggered in the same way as most of the others. It does not involve characters in the present being inspired to involuntarily or voluntarily remember the past, instead it fills in a piece of story that has been happening elsewhere while the narrative's focus had been on the house for a while. Furthermore it fills in that gap in the story by answering a direct question that Mrs. Ramsay asks, in dialogue, when she says "Did Nancy go with them?" (Woolf 94). The long analepsis is thus a kind of metalepsis where the narrator is responding directly to a character inside the narrative. So, while much of this analepsis is concerned with the young people at the beach and their relationships to each other, it has been driven by an act of Mrs. Ramsay, the asking of that question. It also eventually does include a short analepsis within the long analepsis in which Paul remembers

feeling earlier that day that Mrs. Ramsay had been silently encouraging and willing him to ask Minta to marry him. So ultimately we see a return to analepsis serving the purpose of allowing other characters to remember the effect that Mrs. Ramsay has had on them, even while she is still living. Incidentally, directly after the long analepsis ends, there is a short response, in dialogue, back in the present, to Mrs. Ramsay's question that had spurred the whole long analepsis in the first place. This takes the form of a short chapter segment, which, in its entirety, is: "'Yes,' said Prue, in her considering way, answering her mother's question, 'I think Nancy did go with them"' (Woolf 101). The fact that this one sentence serves the same purpose as several pages of analepsis, undercutting the whole effort with Prue's pragmatism, shows some humour in the narrative's approach to temporality.

Ten years later in story time, in the third section of the novel, when the spikes in analepsis over five-page spans become more frequent, the analepses still largely involve other characters remembering Mrs. Ramsay, this time after her death. Occasionally this is mixed with thoughts about other characters. In the analepses near page 200, the narrative moves from Lily thinking at her easel to her memory of an interaction with Mr. Ramsay the night before, when he had remarked that "You find us much changed" (Woolf 193). This recollection is caused by Lily's present line of thinking, about the strained nature of their friendship at present. While thinking of the night before Lily remembers how she "had looked round for some one who was not there, for Mrs. Ramsay, presumably"(Woolf 194). Shortly after this there is then a short reference to Mrs. Ramsay's death: "Mrs. Ramsay had given. Giving, giving, giving, she had died–and had left all this" (Woolf 195). Even when thinking of Mr. Ramsay, Lily cannot help her thoughts from drifting to the absent Mrs. Ramsay and the hole her death has left in their lives, how their relations have changed without her being there. In this same span of pages, for his part Mr. Ramsay remembers that years before Lily had been supposed to marry William Bankes. Immediately after this, in another act of remembering, Mr. Ramsay internally concedes that he had been ill-tempered just that morning at breakfast with Lily. Later he remembers the fact that Mrs. Ramsay used to send care packages to the lighthouse keepers (Woolf 197). Much like Lily, William, and Paul before him, his thoughts end up with his departed wife.

Around page 215, Lily has a flash of several short memories in one sentence: "herself and Charles Tansley and the breaking wave; Mrs. Ramsay bringing them together; Mrs. Ramsay saying, 'Life stand still here'; Mrs. Ramsay making of the moment something permanent" (Woolf 210). Shortly after this is a description of the present scene with Mrs. Ramsay spoken about in the

present tense, as if she is there with Lily, because for Lily her memory of Mrs. Ramsay is so present. "In the midst of chaos there was shape; this eternal passing and flowing (she looked at the clouds going and the leaves shaking) was struck into stability. Life stand still here, Mrs. Ramsay said. "Mrs. Ramsay! Mrs. Ramsay!" she repeated. She owed it all to her" (Woolf 210). These echoes of the past continue to underline the importance of Mrs. Ramsay to Lily personally, to the extent that she imagines her to be present even when she is not.

The spikes near pages 230, 235, 260, and 265 also feature Lily remembering Mrs. Ramsay. Near 230 and 235 Lily remembers Paul and Minta and their failed marriage, and William Bankes, but both recollections lead her ultimately back to Mrs. Ramsay. Near 260 and 265 Lily thinks of Mr Carmichael and Charles Tansley, as well as what the house used to be like years ago, but again eventually her thoughts turn to Mrs. Ramsay. Lily again pictures Mrs. Ramsay present with her, but what she sees is just a memory. It is clear that Mrs. Ramsay is hugely important in the novel, to the extent that her presence and absence inform the movement of the narrative itself back and forth through time. The remembering of Mrs. Ramsay by the other characters in *To the Lighthouse* is also different to the practices of remembering in the other two modernist novels discussed so far. In *The Sound and the Fury*, Benjy and Quentin think of Caddy, but the memory of her is not a central narrative feature in the third and fourth sections of that novel. In *Pointed Roofs*, Miriam Henderson thinks of her sister and other family members sometimes, but more often her analepsis serves the purpose of recounting her days generally, the immediate people and events around her at the school. In *To the Lighthouse* the remembering of this one character is sustained throughout (apart from during 'Time Passes'). In *To the Lighthouse*, unlike those other two novels, the novel does not change its narrative time strategy towards its end so much as provide a culmination of its existing strategy, the remembering of this character. Whether the memories are recent or distant, her friends and family think of her with great feeling and import.

As can be seen in Table 6.3, *To the Lighthouse* has the shortest average analepsis length of the modernist novels in this corpus: the average length of one instance of analepsis is about 66 words. This is only slightly shorter than the corresponding figure for *Pointed Roofs*, which is 70 words, but these two averages are both significantly shorter than the next longest, for *The Sound and the Fury*, which has an average analepsis length of 113 words. As can be seen in the table below, the average only gets longer in the other novels. This leads one to question why the instances of analepsis in *To the Lighthouse* and *Pointed Roofs* tend to be shorter than

Title	Total Word Count	Words in Analepsis	No. of ana tags	Avg length of 1 ana
Three Lives	85,643	65,142	32	2,036
The House in Paris	79,565	52,570	130	404
Tender is the Night	108,784	22,714	119	191
The Sound and the Fury	96,488	21,020	186	113
Pointed Roofs	55,719	8,606	123	70
To the Lighthouse	70,060	9,304	140	66

Table 6.3: Analepsis statistics from only the modernist novels in the corpus, to indicate how *To the Lighthouse* compares to its peers in terms of average analepsis length. Sorted in descending order by that statistic.

those found in the other novels. Part of the reason could be that their narrative style is the most similar to each other. Stylistically *To the Lighthouse* has elements from both Faulkner's novel and Richardson's: the range of characters' perspectives found in *The Sound and the Fury* (but Woolf gives us the perspectives of even more characters), and the deep psychological free-indirect-discourse narration of *Pointed Roofs*. From sentence to sentence, the style of *To the Lighthouse* is closer to that of *Pointed Roofs* because of that use of free indirect discourse; *The Sound and the Fury* on the other hand uses a mix of free indirect discourse and stream of consciousness, most of the novel using the latter as that is the method employed in Benjy, Quentin, and Jason's sections. The comparison between Faulkner's novel and Woolf's is more structural in that they both provide the perspectives of multiple characters, but the manner in which they do this - separate sections versus often-changing perspectives over the course of the novel - is very different. Furthermore the free-indirect-discourse prose in *To the Lighthouse* is more similar to that in *Pointed Roofs* than to the stream-of-consciousness prose in *The Sound and the Fury*. While Woolf's and Richardson's styles are still quite different, the fact that they are more similar to each other than to Faulkner's style perhaps correlates with the fact that they have similar average analepsis lengths. One other potential reason for similarities and differences generally in the average lengths of analepses is variations caused inadvertently by the encoder: myself. However, this potential risk is judged to be minimal because I have applied the same annotation criteria, supported by written guidelines, to all of the texts in the corpus. Every narrative feature that is encoded is treated the same way: the tags begin and end at the exact point when the narration moves into and out of that feature, even if those things happen

in the middle of sentences. The process being the same for each text should ensure uniformity of results. Beyond that, any natural accidental variation should even out over the course of these long texts.

Finally, it should be noted that 'Time Passes,' the middle section of *To the Lighthouse*, does not use analepsis in the same way as the rest of the novel. Indeed, there is very little analepsis in this section. 'Time Passes' has 407 words in analepsis, out of 5,754 total words, so about 7% of its words are in analepsis. The novel's first section, 'The Window,' has about 11% of its words in analepsis, and the third section, 'The Lighthouse,' has about 19% of its words in analepsis. In the novel as a whole, analepsis tends to appear inside free-indirect-discourse prose, with a particular character experiencing a memory. In 'Time Passes,' most of the section is not narrated using the free-indirect-discourse technique found in the rest of the novel; there are only some short sections from the perspective of Mrs. McNab, and then Lily right at the end as the prose transitions back into its normal mode. The rest of the section is told from the perspective not of a character, but seemingly of the wind, the forces of nature, and even, it seems at times, of ghosts in the unoccupied house. For most of this section, this distant focaliser does not use analepsis, rather it presses forward relentlessly in an accelerated present, covering 10 years of story time in 26 pages. When this focaliser does use analepsis, it does so to bluntly explain the fate of the novel's central character, such as in the passage when "Mr. Ramsay, stumbling along a passage one dark morning, stretched his arms out, but Mrs. Ramsay having died rather suddenly the night before, his arms, though stretched out, remained empty" (Woolf 167). Otherwise it presses on, ignoring the past, speaking of the other characters and their fates with equal coldness, and marking the effects of the passage of time on the house. Most of this section's words in analepsis come towards the end and appear close together, as Mrs. McNab's perspective begins to be used as she prepares the house for the arrival of the family once again. She remembers what the house used to be like; her recollections focus on the house's old staff as well as the owners, and she does not privilege the memory of Mrs. Ramsay like the other characters do. Her re-introduction of analepsis, and the act of remembering, coincides with the re-awakening of the house; the narrative style becomes more human again as the house is readied for the family's return. In this way 'Time Passes' evolves out of its distinctive narrative style and becomes more similar to the other sections towards its end, as it re-integrates with the rest of the story, and a more familiar, slower flow of story time forwards, with the return of memories looking back.

To expand our focus beyond this novel, as one can see in Table 6.3, *To the Lighthouse* and *Pointed Roofs* have shorter average analepsis lengths than the other modernist novels. *The Sound and the Fury* is the closest comparison, but even it is quite different in this regard. *The House in Paris*, *Tender is the Night*, and *Three Lives* all have much longer average analepsis lengths. This is due to structural factors: *The House in Paris* and *Tender is the Night* both have long sections in their middles which take place about 10 years earlier; each of these sections is one very long analepsis (with the usual shorter analepses within it), covering dozens of pages. The presence of such a long analepsis will, of course, cause the average analepsis length to be greater. *Three Lives* also features very long analepses which cover many pages, just not with the central location used in the other two novels, so it too naturally has a long average analepsis length. Next we will examine Bowen and Fitzgerald's novels together because their structures are so similar, and then turn our attention to Stein's novel.

Tender is the Night and *The House in Paris*

Tender is the Night and *The House in Paris* have broadly similar structures as novels, but within those broad similarities there are several differences illustrated by the data, showing that there are in fact quite different narrative strategies at play in these two 1930s novels. Broadly, both novels are divided into three sections, with the first section beginning at a point in the present, the middle section flashing back about ten years, and the third section occurring in the present again. Within that framework, there are quite a few differences. Somewhat superficially, there are differences in the amount of time those sections cover in each novel. In *The House in Paris*, the first and third sections occur over the course of the same single day (with some notable analepses which we will discuss further shortly), while the middle section is entirely devoted to a long analepsis that covers a span of some months, ten years before the day narrated in the first and third sections. In *Tender is the Night*, the first section takes place over a few weeks, the middle section begins with a long analepsis that begins ten years before those events, and then catches up with the period of time left behind, long before 'Book 2' of the novel actually ends. As such, in total the middle section spans ten years. The third section of Fitzgerald's novel then continues much like the later part of the second section, covering more time, until the narrative ends several years after the period in which it was begun. *Tender is the Night* is engaged with memory and trauma thematically, but uses analepsis less frequently over its considerable length than the previous three novels analysed here. This suggests that perhaps

the characters are not as willing to do the work of engaging with their past as they would like to think. Furthermore, proportionally the long analepsis in the novel's middle does not take up as much of this novel as the long analepsis does in *The House in Paris*. The long analepsis in Bowen's novel is deeper and more detailed than the one in Fitzgerald's text. In a sense it is the main story of the novel, and the first and third sections are a kind of frame narrative for it, although they are very rich on their own, with their own rounded characters. Every event in those sections flows from the events of that middle section. The first and third sections also feature frequent analepses, showing how the past is always hanging over everything in this novel. These two novels are useful to compare because of how they use similar conceits and yet diverge in significant ways. In this section of this chapter we are concerned with the specifics of how, where, and why these two novels use the narrative function of analepsis. We address both the nature of those long ten-year analepses, and the shorter analepses that they both feature embedded within themselves, and how analepsis is used in the first and third sections of these novels.

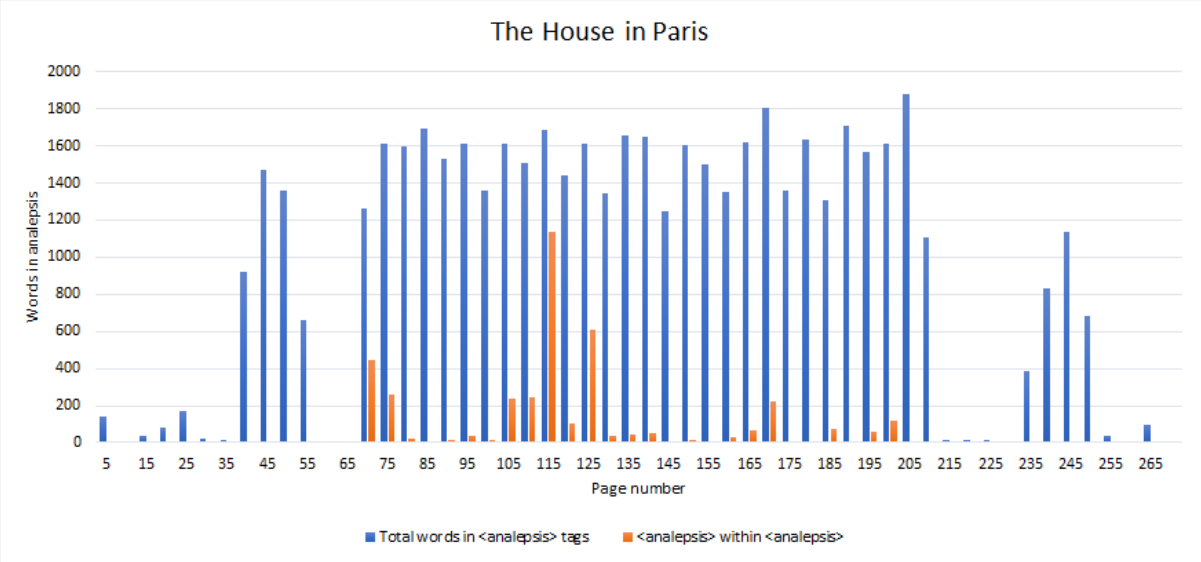

Figure 6.16: Numbers of words in analepsis, and words in analepsis within analepsis, grouped every 5 pages.

A key to understanding how analepsis is used in these two novels is the data on how much analepsis occurs over the course of the whole novels and in their individual sections. Firstly it is helpful, as before, to look at graphs of the extent of the usage of analepsis over regular intervals in these novels. In addition, this time the use of embedded analepses - shorter flashbacks within the main long analepses - are also represented.

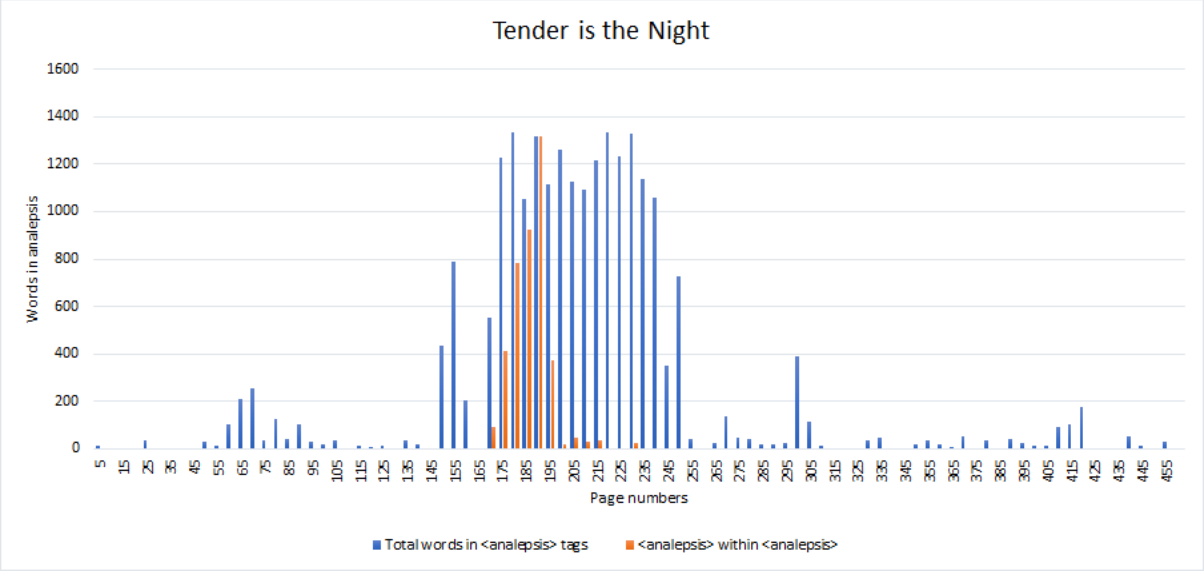

Figure 6.17: Numbers of words in analepsis, and words in analepsis within analepsis, grouped every 5 pages.

Another useful way of considering these numbers and comparing the two novels is to look at them in terms of percentages of the lengths of the novels, rather than page numbers, because the page counts of the two texts are so different, and in terms of percentages of words per page that are inside analepsis tags, because the lengths of the pages also vary.

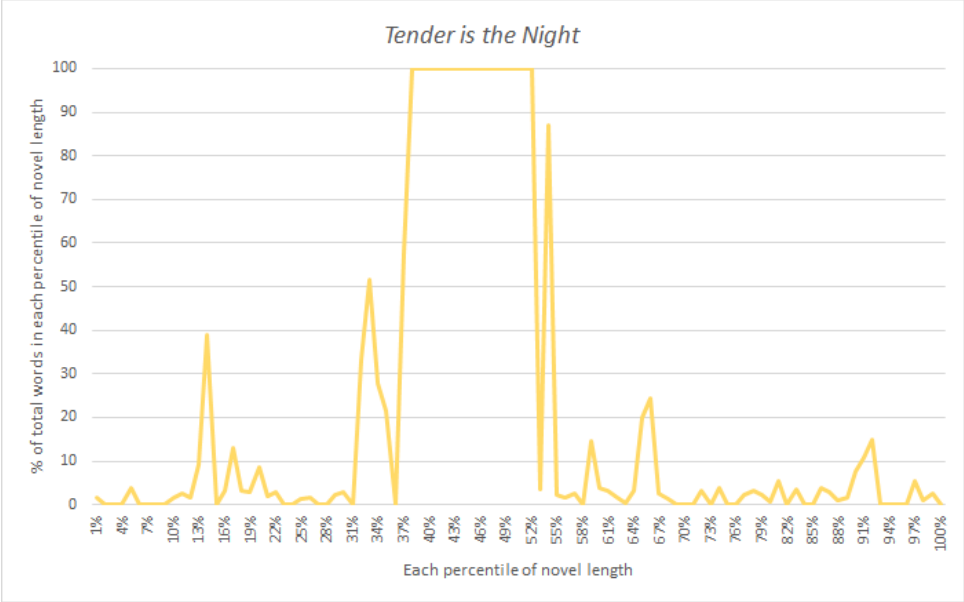

Figure 6.18: Proportion of words spent in analepsis in each percentile of the novel.

Figures 6.18 and 6.19 make it all the more clear that proportionally, much more of Bowen's novel occurs in analepsis than Fitzgerald's, and the long analepsis in the middle takes up a much bigger part of the novel in *The House in Paris* than in *Tender is the Night*. This is borne out when considering the overall proportion of words in analepsis in these two novels. 20.87%

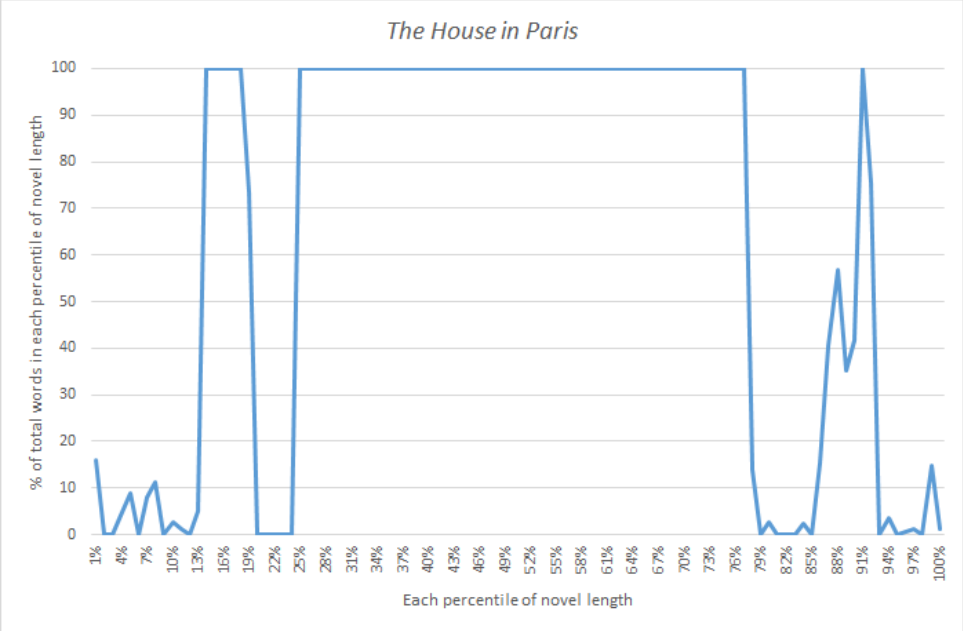

Figure 6.19: Proportion of words spent in analepsis in each percentile of the novel.

of the words in *Tender is the Night* occur in analepsis tags. This is relatively normal for a text in this corpus - if we refer back to Figure 6.3 we can see that a majority of the texts in the corpus have close to 20% of their words in analepsis. Contrastingly, 66.07% of the words in *The House in Paris* occur in analepsis. Analepsis is a much larger, and more significant, part of Bowen's novel. There is also a great difference in how the two novels use analepsis in their different sections. In *Tender is the Night*, the analepsis is concentrated in the middle section, with 44.7% of the words in 'Book 2' occurring in analepsis, while the equivalent statistic is only 6.6% in 'Book 1' and 2.8% in 'Book 3.' There is, of course, an enormous proportion of words in analepsis in the middle section of *The House in Paris*, with 98.4% (the entire section apart from its short first seven paragraphs), but there is still a significant proportion of words in the other two sections that are also captured by analepsis tags. 27.9% of the words in 'Part 1' occur in analepsis, while the figure in 'Part 3' is 19.1%; these are far greater proportions than those found in the corresponding sections in Fitzgerald's novel. The spikes in the words-in-analepsis-per-page graph had seemed to suggest that analepsis is a bigger feature in the first and third sections of *The House in Paris* than in *Tender is the Night*, and these numbers support that argument. Bowen's novel clearly spends more time in analepsis - spends a greater proportion of its words there - throughout its length than Fitzgerald's novel does. Even in the sections that take place in the present, there is much attention given to events of the past, and their influence on the current moment. In *Tender is the Night*, the past has had a huge effect on

the present, but the data shows that the past is not directly referenced much in the actual text of the present sections. Repression of memories and emotions occurs with the characters and descriptions in *The House in Paris*, but ultimately a lot of that novel does address the past. Repression seems to be even more evident in *Tender is the Night*, as the narrative drives forward without referring backwards very much. In terms of word count, the long analepsis in *The House in Paris* comprises the bulk of the novel; Karen's story is the main story from which all else is a consequence. The long flashback in *Tender is the Night*, Dick's story, is similarly the thing that causes every other part of that novel's story to happen, however, in this case those other parts take up much more of the novel than the flashback does. This is possibly because, inside and outside the long analepsis, the narrative is mostly focalised by Dick, and he does not focus on the past. Another possible factor is that Dick's decline (mentally, physically, morally) is a major concern of the novel, and that decline is emphasised by the way that is depicted: slowly and at great length. For that reason it would make sense that the consequence has to be more drawn-out than the initial events. In *The House in Paris* it is the initial events that are drawn out, which is useful in addressing the rich inner emotional lives of the characters in the past. The analepsis in *Tender is the Night* does not quite have such depth. While these two novels share similar structures, the data helps us to understand that these novels actually deal with the past in quite different ways.

The ways in which *Tender is the Night* uses analepsis, outside the long analepsis in the middle, can be analysed by looking at some of the individual instances of analepsis. An early spike in analepsis in *Tender is the Night*, quite a bit before the main long analepsis, concerns the climax of events on the Riviera before the party moves to Paris. First there is a short but significant moment when Rosemary wonders about something that has been said to her, which she does not understand:

> Down in the garden lanterns still glowed over the table where they had dined, as the Divers stood side by side in the gate, Nicole blooming away and filling the night with graciousness, and Dick bidding good-by to everyone by name. To Rosemary it seemed very poignant to drive away and leave them in their house. Again she wondered what Mrs. McKisco had seen in the bathroom. (Fitzgerald 58)

Here the reference to "what Mrs. McKisco had seen in the bathroom" (Fitzgerald 58) is an analepsis, so the annotation for this analepsis begins at the start of the word 'what' and ends

after the full stop. The novel only reveals much later what Mrs. McKisco actually saw in the bathroom; we learn that she saw Nicole breaking down, indicating that she was still struggling with mental health issues. At this point in the novel we have so far been given no indication that Nicole has such problems, so this flash of analepsis actually prefigures information about Nicole's past, in story time, that we learn later in narrative time.

This wondering by Rosemary is followed, six pages later, by a much longer analepsis. Rosemary hears from the other guests that a duel is about to happen. The other characters are on their way to the site of the duel and come to get Rosemary. The narration then moves into analepsis to describe the events that led the duel to happen. The reader learns this information as Rosemary is learning it. This mechanism of revelation creates a sense of disorientation which is appropriate for such an anachronistic activity as a duel. We learn that "[t]he trouble began at the time Earl Brady's car passed the Divers' car stopped on the road–Abe's account melted impersonally into the thronged night" (Fitzgerald 65). The short section that follows that introduction is all narrated by Abe North, in the first person. This is one of a very small number of instances in this novel when the narrator changes from an omniscient third-person observer (focalised by a character) to the first-person perspective of a character. The other times that this happens are also at turning points in the story, and, even more significantly, involve temporal disruption. One instance is Franz's narration, in analepsis (which is also in an embedded narrative level, and in turn is all encompassed by the main long analepsis), of the backstory about Dohmler's meeting with Nicole's father (Fitzgerald 134). The other is the section narrated by Nicole (Fitzgerald 235), which does not involve analepsis but moves forward through time at an accelerated rate, using ellipses to account for the passage of indeterminate amounts of time, so that in a few paragraphs she covers several years and changes of location for the Diver family. The acceleration of narrative time in this brief section is the closest thing in any of the other works in the corpus to Woolf's 'Time Passes,' but even here it is distinguished by its use of the first-person perspective of a character rather than the impersonal perspective of 'Time Passes.' In *Tender is the Night*, these deviations from the novel's usual narrator, and disruptions of narrative time, are so rare that they stand out from the rest of the novel. For a text so concerned with the past, which compared to *The House in Paris* does not spend much narrative time in the past, the times when it does disrupt narrative time have to be important moments in the story. Their effect breaks the forward momentum of the narration, and, relatedly, takes us away from Dick Diver's perspective. For these brief instances the past

is no longer being ignored or denied, it is exposed. In this novel, that carries weight. *The House in Paris* engages with the past at great length inside and outside its main long analepsis, in *Tender is the Night* engagement is more precious. The techniques of both novels work strongly; one is not better than the other. This investigation of some of the particular instances of analepsis does perhaps temper the indications from the data that *Tender is the Night* is less engaged with the past - when Dick's voice is muted for a moment, the novel is actually allowed to reflect.

In contrast, the usage of analepsis in the first and third sections *The House in Paris* maintains the same narrator, and tends to follow a pattern that is familiar from some of the other texts (not least *Three Lives*), where a scene is set up at a particular moment of interest, and then an analepsis is provided to show how that moment came to be. Like its characters, the novel is careful with how and when information is revealed. We see this construction of a set-up followed by a filling-in of the backstory is used from the very first page, when we are first shown Henrietta sitting in a taxi with Naomi, travelling from the train station to the house, and then we are told in analepsis about Henrietta being handed over to Naomi at the train station by her previous travelling companion (Bowen 1). The same construction is then used on a larger scale when Henrietta arrives back in the salon after Leopold has been left alone there for some time. Henrietta says "Leopold! . . . Whatever are you doing? There are enough mad people in this house!" (Bowen 35) and then the narrative flashes back to tell about Henrietta's entire meeting with Mme. Fisher. We then see her descend the stairs and open the door to the salon, catching up with the moment left behind (Bowen 50). The temporal loop is elegantly closed when Leopold speaks his answer to Henrietta's question from 15 pages before, without the question having to be repeated in the narration: "'I am thought-reading, naturally,' Leopold said" (Bowen 50). The analepsis of Henrietta's meeting with Mme. Fisher is noticeable as a spike in the words in analepsis per page graph. That spike is in turn notable for showing how the first and third sections of Bowen's novel use analepses that are multiple pages long, unlike the shorter analepses in Fitzgerald's text, which are more likely to be measured in paragraphs than pages. There are further examples in *The House in Paris* of a set-up in the present followed by an analepsis, such as the scene when Leopold is told he can go downstairs to meet Ray, and we then flash back a few minutes to Ray waiting and thinking in the salon (Bowen 235). When Leopold arrives in the room that analepsis is over because we have now caught up with the point left behind. The narrative function of this analepsis is similar to the earlier one: it

fills in what has been happening with one character while the narration has been focused on other characters in another room. In this multi-page analepsis, there are further short analepses within it, describing the moments with Ray and Naomi in the room before she left him alone to go get Leopold (Bowen 236). These analepses are relayed after the scene has already been set, with Ray smoking alone. The technique is effective at establishing intrigue in situations. While the technique is more predictable than *Tender is the Night*'s analepses, it is also more detailed in its application in this novel, with its analepses tending to be longer. In a way the overall structure of the novel uses the same technique on a grand scale, with the story set up in the present before the narration moves backwards ten years for the bulk of the novel. The same technique is used, at a similar scale to that, in the final modernist novel in this project's corpus.

Three Lives

Three Lives is something of an outlier in the corpus in that it has very few actual analepsis tags (by far the least frequent usage of the modernist novels), because it does not have many moments of transition in narrative time, and yet it contains a lot of words in analepsis. It is a text obsessed with the past, and the vast majority of this novel is told in analepsis: 76.06% of its words. This is the case because while the text is an outlier, it is not devoid of similarities to the other texts. It prominently uses the structural device which we have just been discussing in relation to *The House in Paris*, of setting up a moment in the present and then filling in the backstory, but Stein uses that technique to structure each of the three sections of *Three Lives* in their entirety. In each of those three sections, in the beginning of the narrative a character is established in the present, usually towards the end of their life. The narrative then flashes back many years to tell the story of the same character's life and show how they came to the circumstance in which they are shown in the present. As such, eventually the narrative catches up with, and slightly passes out, the point in story time where the section began. Analepsis may not be used frequently in Stein's novel but the text spends most of its time inside the long analepses that it does have. It is a text fascinated with the making of stories as things that we tell about the past, from the perspective of the present; in this case from the perspective of the ill health and doom that tends to afflict the sections' protagonists towards the end of their lives. The long analepses recount their lives to show how the characters came to this fate over a long period of time. This structure is seemingly simple and repetitive but effective. Like

Stein's sentences, there is an aesthetic of repetition and austerity, here on a macro as well as a micro scale. Both the sentences and the narrative which they comprise are concentrated to best serve their intended purpose. In this sense Stein's novel is one of the most experimental in the corpus, despite being one of the first written, and engages with narrative time in a radical way.

The most similar other text is *The House in Paris*. As has been stated earlier, and shown in Table 6.1, *Three Lives* has the longest average analepsis length, at 467.97 words. The next longest is *The House in Paris*, at 404.38 words on average. The next longest after that is actually *Tender is the Night*, at only 190.87 words. So Stein's and Bowen's novels have something in common that sets them apart from the other novels and hypertexts - when they use analepses, they usually tend to be quite long - and Stein's text takes this to an even greater extreme than Bowen's does.

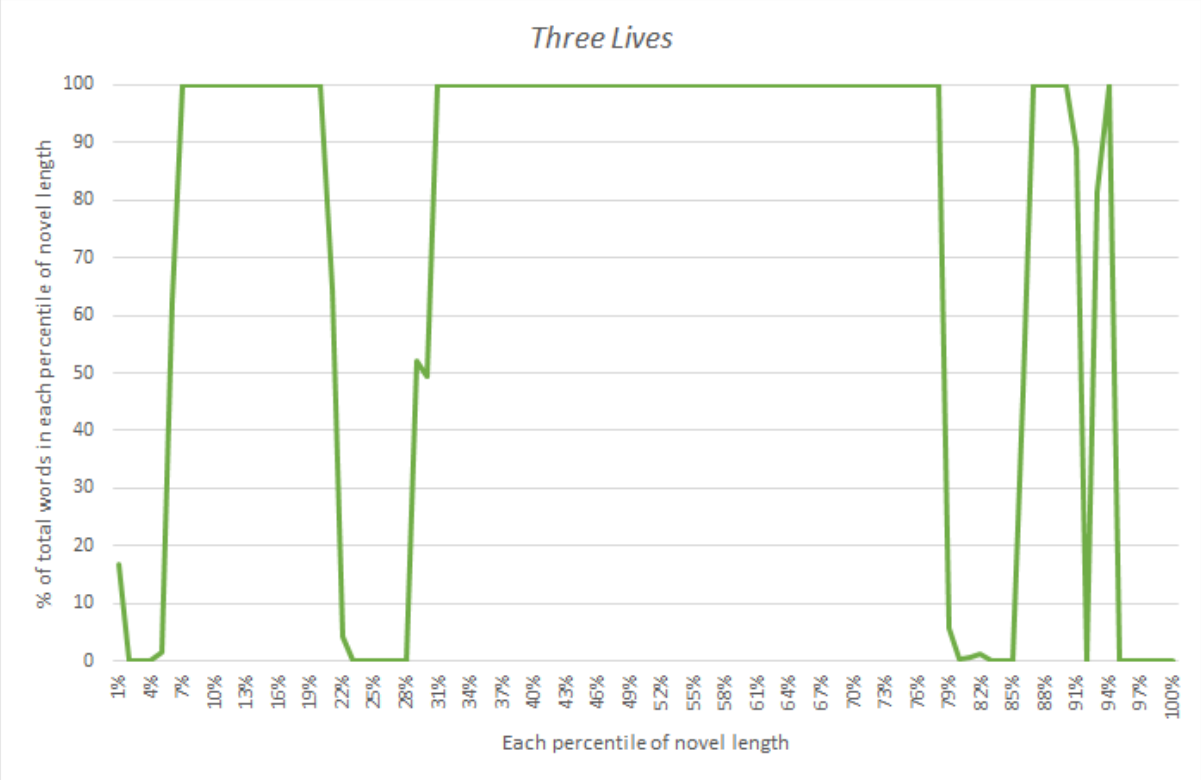

Figure 6.20: Proportion of words spent in analepsis in each percentile of the novel.

The distribution chart, showing the proportions of words used in analepsis for every percentile of the novel, shows just how stark this novel's usage of analepsis is. Most of the time, when analepsis is used, it is used for whole long stretches of text at a time, without breaks. When the narrative transitions into the past, it stays there for a long time. Outside of those three

main instances, the novel uses analepsis very little.

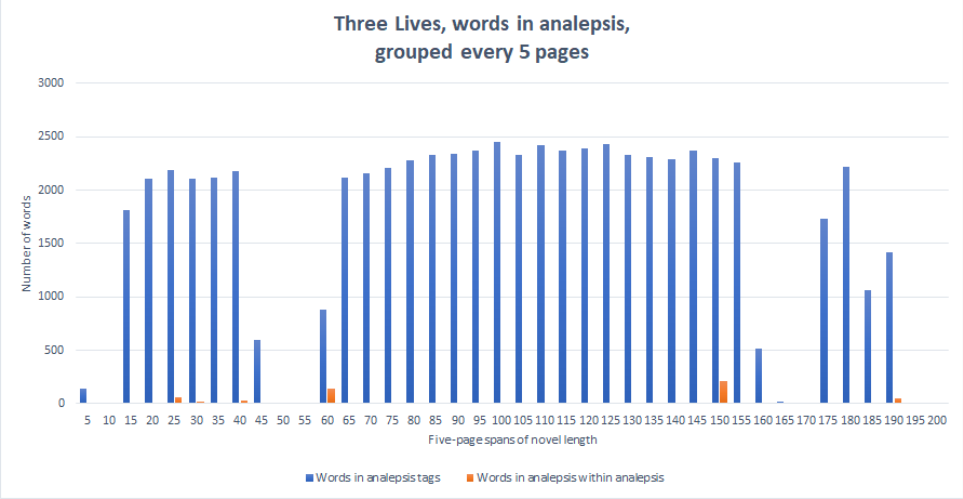

Figure 6.21: This graph provides a slightly different perspective than Figure 6.20, and corroborates the pattern that Figure 6.20 suggested.

As we can see in both Figure 6.20 and 6.21, the longest section and the longest analepsis is the middle one, which is bookended by two shorter sections. The third section is particularly brief. Those proportions are somewhat similar to *The House in Paris*, as that novel's middle section is its longest piece - and longest analepsis - although the third section is not so dramatically shorter than the first. In *The House in Paris* the middle section is the longest because it is the foundation of the story; all else comes from it. While the amount of words spent on a section is not proportional to the importance of that section, the extent to which the middle section of *Three Lives* is longer than the other two does at least prompt some wondering as to why that is. This middle section, called 'Melanctha' after its protagonist, is not markedly different in plot terms than the other two sections. It deals with the difficult life of a working woman, her ultimately doomed friendships and romantic relationships, the pain that she experiences as a result of her physical labour, and finally her death. As has been implied already, the narrative begins at a point near the end of Melanctha's life and then soon flashes back into the past, where it remains for most of the section. Near the end, the narrative then catches up with the point in time it left behind near the start. However, the proportion of the section's words that it spends in analepsis is greater than in the other two sections. 'Melanctha' spends 90.68% of its words in analepsis, while for the novel's first section, 'The Good Anna,' that figure is 60.57% and for the third section, 'The Gentle Lena,' it is only 47.15%. The proportion for the novel as a whole is 76.06%. The reason for 'Melanctha' having the highest proportion of words in analepsis is that it has, by absolute word count, the shortest beginning in the present, before its long analepsis,

and also the shortest ending after rejoining the present, despite being by far the longest section. 'Melanctha' has 1,112 words before its long analepsis and 3,300 after, while 'The Good Anna' has 3,905 words before its long analepsis and 4,043 after, and 'The Gentle Lena' has 1,886 words before its long analepsis and 7,218 after. So, 'Melanctha' gets into its analepsis quicker than the other two sections, and stays there the longest with the shortest time at the end to wrap up the story. The time in the past is the most important thing for this section. As such, it uses the same technique that is present in each of the three sections in this novel, but does so to the most pronounced degree. Similarly, the prose style of the section makes even more extensive use of repetition than the other two sections. It has the most experimental prose of an experimentally-styled novel. Meanwhile, the main thematic difference between this section and the other two is that it is the only one in which the protagonist is a black woman rather than a white woman. So, somewhat radically for the time, Stein has given the longest and central section of her novel, and the section with the most progressive prose style in a novel of progressive prose, to a black protagonist. The narrator is still the same omniscient third-party figure used in the other two sections, so Melanctha does not get to speak for herself - although neither do 'The Good Anna' or 'The Gentle Lena.'[1] What we do see in 'Melanctha' are themes from the novel as a whole, using a familiar structure, but painted on a bigger canvas, in an even more extreme style, and with a black protagonist. Overall, Stein's novel has relations to the other modernist novels in its narrative devices, but stands on its own as a technical achievement which pushes boundaries both stylistically and thematically.

6.4.2 Hypertexts

Uncle Roger

Uncle Roger features both analepsis and prolepsis more frequently than any other text. A reader can begin their journey through this text by selecting any of its 251 lexias. If one follows the numbering scheme of the lexias and proceeds in a linear fashion from the first-numbered lexia, they will find the protagonist and narrator, Jenny, trying to sleep after a party in her employers' home. The narrative then flashes back to the party, with many lexias describing scenes from

[1] Curiously, the section 'Melanctha' is the only one whose title does not apply an adjective to the protagonist's name. While Melanctha's section is the greatest in terms of length and prose-stylistic experimentation, its title does not provide a word of praise to Melanctha.

the night. Later in the text, Jenny's narrative will move forward from the point where we first met her, but it will also go backwards to provide memories of her former partner. The rest of the text often makes similar moves back and forth through time. It is perhaps too postmodern and distant, even though it uses first-person narration, to give its characters the depth achieved in most of the modernist texts in the corpus, yet it is still broadly concerned with its characters' personal lives (in addition to satirising the 1980s computer industry). It could be because of that shared concern with interpersonal relationships that this text moves through time in a way that is similar in some respects to the patterns of analepsis in the modernist novels; a narrative begins in the present and then jumps back in story time as the result of a recollection by a character. Yet *Uncle Roger* is even more narratively fragmented than its modernist forebears, and there is no escaping the fact that this is largely due to it being a hypertext made up of related yet simultaneously discrete lexias. *Uncle Roger* is further fragmented by the fact that it is divided into three sections, each with slightly different styles of linking to the next lexia. This kind of experimentation of changing the way that the reader gets to the next piece of content, of course, could not be done in modernist fiction. [2] *Uncle Roger* is further fragmented by the fact that a reader can read the lexias in any order. One can progress through the lexias from their numeric beginning to end but there is no imperative to do this beyond the implication of those numbers. That creates a sort of duality; the lexias can be read in any order and yet an order is implied by the numbering scheme. The text is at once chaotic and highly structured; each individual lexia links to only a small number of other ones. The directional movement of the narrative in time can to a large extent be determined by the author through their arrangement of those hyperlinks (if the reader chooses to obey them). This allows very discernible storylines to emerge. These plot-lines, while somewhat outlandish in their content (because this is a satire) are not difficult to follow. *Uncle Roger* is highly experimental while simultaneously using old literary devices (a mcguffin, a corporate espionage plot, the reappearance of a former lover). Fittingly, the text's depiction of time is both recognisable in some ways - the triggers that cause it to move backwards in time - and new in other ways - the extent of the fragmentation, and the fact that the flashes go forwards as well as backwards in story time. The text itself, and

[2] It is acknowledged that, of course, some modernist novels invite readers to read their pages in a sequence that is not the same as their order from beginning to end of the physical book - for example *Finnegans Wake* - but this does not occur as much as it does with as their postmodern successors from Nabokov and Calvino. *Uncle Roger* not only invites one to read out of order, but demands that one do so in different ways at different points in the text. Modernist novels do not do that.

the story, are more fragmented, dispersed, and chaotic than the modernist novels in the corpus (with the possible exception of the first two sections of *The Sound and the Fury*, which we have already compared to hypertext). That greater fragmentation in both form and content leads to more frequent analepsis and prolepsis.

The nature of hyperlinks also leads to more frequent analepsis and prolepsis. If one clicks a link in a lexia, and the next lexia that appears is recognisably before or after the previous one in story time, then an analepsis or prolepsis has occurred. This is the case even when the next lexia is very shortly after the previous one, because, of course, the hyperlink inherently disrupts the continuity of the narrative and introduces artificial jumps in time. When the next lexia one encounters is an analepsis or prolepsis relative to the one seen immediately before, it must be entirely encompassed by the relevant tag. This happens extensively in *Uncle Roger*. 50 of the text's 250 lexias are entirely encompassed by analepsis tags, while 179 are wholly prolepsis. That leaves only 21 lexias that are not entirely encompassed by any anachrony tag, implying that the text tends to make jumps to recognisable points in time, which makes it easier to comprehend from moment to moment. In total, only 77 of the text's 250 lexias use analepsis at all, either encompassing the whole lexia or internally in the course of the prose. Some lexias have analepsis tags both within them and encompassing them, so there is some overlap in the figures; 31 lexias have analepsis tags within them, regardless of whether they are encompassed by an anachrony tag or not. Meanwhile, 197 of *Uncle Roger*'s lexias use prolepsis at all, but that tag is only present internally in 19 lexias. This indicates that in this text prolepsis is more important, but more so structurally than in the prose. Analepsis is less likely to appear, but when it does it is more likely than prolepsis to occur within a lexia, in the actual prose. That suggests a similarity to the prose style of the modernist novels, at least in terms of how they use anachrony.

In this text, when analepsis is used within lexias, and when the entire lexia is not itself an analepsis, then the lexias are more likely to have less than half of their words within analepsis. More than three times as likely, in fact: only six of this kind of lexia have more than half of their words in analepsis, while 20 feature less than half their words in analepsis. This indicates that in *Uncle Roger*, analepsis is being used more for brief flashes of memory or digressions about past events, rather than long accounts of past events that are framed by shorter descriptions of happenings in the present (as we have seen in *The House in Paris*, *Pointed Roofs*, and, of course, *Three Lives*). It uses analepsis in a manner more similar to *To the Lighthouse*, where

analepsis occurs as the characters remember events from the past. *Uncle Roger* uses prolepsis in a way that is somewhat similar to *The Sound and the Fury*, where the technique is used structurally, rather than for brief memories or indications of the future. These factors could be seen as a debt to modernism, or simply a coincidence; at least there is a similarity.

The content of *Uncle Roger* is not particularly modernist, apart from its occasional focus on memory. It is in its content more of a postmodern text, with absurdist elements in the plot and characters, a focus on technology's increasing effect on people's lives, and on conspiracies. Yet memory is important in how the protagonist, Jenny, reflects on her past, writes in her journal, and thinks about the party at the end of the night. Analepsis might not be used very extensively in this text, but when it is used it tends to be associated with moments of significance for the protagonist. The things she remembers are the things that have moulded her character and led her to the choices that brought her to Silicon Valley. Analepsis provides key background detail that allows Jenny to be the most completely-formed character in this text. Prolepsis, while used more extensively in *Uncle Roger*, does not contribute to character development in this way, while it is of key importance in how the text moves from lexia to lexia and how the narrative is constructed. As such, we see that both kinds of anachrony, and their different proportions of usage in this text, serve important functions.

Twelve Blue

Twelve Blue is similarly fragmented, and has a structure similar to *Uncle Roger* in that a reader can read its lexias in any order. It has a similarly high frequency of analepsis, although much less frequent prolepsis, as we can see back in Figures 6.1 and 6.2. The lower frequency of prolepsis tags is due to the fact that this text creates continuity in a different way than *Uncle Roger*. The reader is less likely to encounter lexias in succession that advance along a storyline in a linear fashion. Instead, a link from a given lexia is more likely to bring the reader to a lexia that engages with another storyline. Storylines do exist, but they evolve through pieces revealed in different sections of *Twelve Blue*, and build up in the reader's mind over time. The text is more dispersed, with more characters and no central protagonist. The discontinuous reading paths engendered by this text causes there to be fewer whole-lexia analepses just as there are fewer whole-lexia prolepses, and yet analepsis tags are still very frequent. From that we can infer that the analepsis tags tend to occur within lexias rather than encompassing them. This

means that on the level of a given lexia, *Twelve Blue* essentially continues the practice from the modernist novels (which does not only exist in modernist novels) of setting up a point in time in the present and then going into the past to explain how we got there, or to show the memory of the point in the past that the present character is thinking about. However, on an overall level, *Twelve Blue* is so narratively dispersed and untethered from linear time that it is behaves very differently to modernist texts. Analepsis is happening more frequently because it is occurring in many separate lexias, and the lexias are short, creating tighter narrative frames; a lot has to be achieved in fewer words than in a novel. Tags have to be used again because they cannot span multiple lexias. The text is fragmented and the story is fragmented, concerning multiple people in multiple times, and all of those things combine to make analepsis more frequent in this text than in the modernist novels. Within lexias the usage of analepsis may be similar, but overall in terms of both story and form the text is more experimental than the modernist novels and requires more analepsis to happen in shorter spans of words. This text is continuing some aspects of modernism, but using them in a more extreme way; the result of that is more frequent analepsis.

In addition, *Twelve Blue* has a higher proportion of lexias that have analepsis tags within them than *Uncle Roger* does. While only 2 of the 86 lexias in *Twelve Blue* are entirely encompassed by analepsis tags, 49 lexias have analepsis within them. Prolepsis is less of a factor in this text, as there are 5 lexias entirely encompassed by that tag, and only 4 with prolepsis tags within them. An early conclusion to draw from the analepsis numbers is that *Twelve Blue* dips in and out of memories and flashbacks more frequently than *Uncle Roger* does, or at least that it is more likely to mix analepsis with narration of the present. While *Uncle Roger* has a sizeable minority of lexias that feature analepsis tags within them, most of its lexias that feature analepsis do so in the form of whole-lexia analepses. *Twelve Blue* has a much greater proportion of within-lexia analepsis, in addition to its greater proportion of lexias that feature analepsis at all. The texts are more similar in other statistics though. While a higher proportion of the lexias in *Twelve Blue* have analepsis tags, if we ignore lexias and examine the texts in terms of their overall word counts, relative to those, analepsis is used with a similar degree of frequency in *Twelve Blue* and *Uncle Roger*.

If we compare the normalised frequency of the analepsis tags in *Twelve Blue* and *Uncle Roger*, we will see that the numbers are 61 for *Uncle Roger*, and 51 for *Twelve Blue*. So, the two texts are not too dissimilar in terms of how frequently the tags are occurring relative to their total

word counts. Also, in total, 24.6% of the words in Uncle Roger are in analepsis compared to 23.1% of Twelve Blue's words. So the two texts as wholes are more comparable than initially expected. What is different is the way they move back and forth between past and present. When *Twelve Blue* uses analepsis it is more likely to be for part of a lexia, while when *Uncle Roger* uses the technique it is more likely to do so for an entire lexia at a time. The difference in their statistics suggests that the texts use different strategies for accessing memories, one more fluid and the other more structured. Also, it is through this that we see one of the limitations of focusing on lexias (or pages) that are bound to be different lengths, even with texts. When we examine narrative in proportion to total word counts, the large differences that we thought existed can be collapsed to reveal that two texts are more similar to each other than initially thought.

my body - a Wunderkammer

To return first to considering lexias, *My body - a wunderkammer* has a proportion similar to *Twelve Blue* of its lexias that are partially analepsis; 58.54% of its lexias are partially made up of analepsis. In this text, a lexia will often use essentially the same narrative technique described in relation to *The House in Paris* and *Three Lives* in particular, of beginning a section in the present and then moving back in time. Unlike those texts, however, the analepses in *my body - a Wunderkammer* do not usually catch up with the point left behind before the transition into the past. Rather, the analepses here tend to be separate short descriptions of specific events that are linked thematically to the things discussed in the present in the opening part of the lexia. In this text, naturally those thematic links are associations with various parts of the narrator's body; thinking about a part of the body in the present triggers a recollection of something involving that part of the body in the past. The analepses detail events that tend to be otherwise unrelated to the narration in the present; they form their own distinct narratives and even are usually put into separate paragraphs. As such the transitions in time usually correspond with a transition in narrative level. Furthermore, each lexia is separate from the others in narrative terms; stories do not continue across multiple lexias, instead each lexia stands on its own. As such the text is made up of many separate vignettes, with no overall continuity. As a result of this lack of continuity, it follows that analepsis would be more frequent here than in a modernist novel. In each lexia the narrator is always the same, but they are all discrete narratives, like a collection of diary entries, or a short story collection.

A modernist novel maybe could do this, but not in the interlinked manner of this text, where certain words will bring the reader to lexias discussing thematically similar subjects. These links function almost like footnotes in a biography, and this text very much engages with the tropes of personal writing and autobiography, and transgresses them by introducing elements that are obviously fantastical. The text remains multitudinous, fragmented, and not continuous, so it is to be expected that it would have more frequent analepsis than a modernist novel.

When prolepsis is used in Jackson's text, it tends to be used alongside analepsis rather than on its own. There are 7 lexias which only contain analepsis, but just 2 that only have prolepsis tags. When prolepsis is used it tends to be a reaction to the use of analepsis, a return to the present from the past rather than projecting forward into the future. In contrast, analepsis can sometimes be used on its own, as when a lexia diverts into the past but then never returns to the present. Throughout this text, prolepsis is used to create juxtapositions, remarks about the present that act as counterpoints to the events described in the past. When this happens, the narrative does not fill in all the time that passes between the events of the past and the thing being described in the present. The two moments in time do not become joined by the narrative catching up with itself, as we see in the modernist novels, instead they remain separate. The technique is similar, but is enacted in a different way.

Another result of *my body - a Wunderkammer*'s structure of interconnected but narratively separate units is that this text does not share the whole-lexia anachronies that indicate storylines continuing across lexias, as found in some of the other hypertexts. All of its analepses and prolepses occur within lexias rather than encompassing them. *My body - a wunderkammer* is emerging as an outlier in this sense, indicating that it uses analepsis in a different way to the other texts. And it does, because we know most of the lexias begin in the present with a setting up of a body part - a frame narrative - before recounting a memory that is also an embedded narrative. So in this way the figures are confirming what we already know, but also highlighting how different that is in its practice to the other texts and how they use analepsis.

Jackson's text is different from the other hypertexts in its practice, and also emerges as idiosyncratic in its overall statistics. It has the highest proportion of words in analepsis of any of the hypertexts, with 38.67% of its words occurring inside analepsis tags. It is in the middle range of the hypertext corpus in terms of the equivalent statistic in prolepsis, with 16.27% of its words being in prolepsis. In normalised frequency of tags, the text is in the low side of the

middle range of the hypertexts in both analepsis (25.83) and prolepsis (20.78). All of those figures taken together indicate that *my body - a Wunderkammer* has few, but usually lengthy, instances of analepses and prolepses. These techniques are an important part of the text, and it uses them not just for brief flashes but for substantive trips into the past and back to the present. The substantive, lengthy nature of the anachronies corroborates the fact that those same anachronies are often discrete narratives that exist on distinct diegetic levels.

my body - a Wunderkammer uses analepsis and prolepsis a great deal, yet not in transitions between lexias. It uses them in its own way, and combines them with embedded narrative levels. This text jettisons some of the baggage of continuing storylines in favour of an approach in which the discrete parts complement each other to create a coherent whole.

Seed and *Voyage into the Unknown*

Seed and *Voyage into the Unknown* are discussed together here because they are similar structurally; they both invite linear readings because of their visual design - although one can select any lexia in any order - and if one follows those linear readings, one finds a story that is roughly chronological, apart from some analepsis, of course. If *my body - a Wunderkammer* is an outlier in terms of using anachrony a lot, *Seed* and *Voyage into the Unknown* are outliers for using it comparatively very little. In the graph of proportion of words in analepsis relative to total words in each hypertext fiction (Figure 6.3), *Seed* and *Voyage into the Unknown* are two of the bottom three texts. The other hypertext in that range is *Victory Garden*, but its structure is quite different than that of these two texts.

Seed has such infrequent analepsis and prolepsis because its main narrative device is instead the use of parallel narrative levels. Changes in level create fragmentation in this text rather than measurable changes in time. The reader can read the lexias in any order, but the visual design of the text's interface encourages the reader to start at the beginning of the story and proceed along the main thread, which results in a narrative that can be much more linear than most of these other hypertexts. It is within each lexia that the fragmentation occurs. In most of the lexias there are usually two stories being told, at roughly the same period but at necessarily different specific points in time, although one is never certain which one is earlier, so one must only classify them as separate narrative streams, although they are technically also anachronies. The argument that the parallel narratives are separate narrative levels, as stated in Chapter 4,

is that because the narrator is speaking from a different point in time (narrating in the first person, present tense) they are in effect a different narrator with different experiences. The text is similar to *The Sound and the Fury* in its fragmentation and use of italics to signify a change, although in that text we are moving through a character's memories, from the perspective of the present, so the narrator is always the same, so there is analepsis and prolepsis (which are measurable because we are able to determine the order in which story events happened) but not narrative level changes. As such, in *Seed* we again see a hypertext that is similar to modernist fiction in ways but operates in a different manner, creating different frequencies of analepsis and prolepsis, numbers that are explainable by the text's content and form.

Voyage into the Unknown's content is quite different. It has elements in common with nineteenth-century epistolary fiction (reflecting the time period in which the story is set), although the increased fragmentation is a result of the hypertext form. While the text is presented in a linear fashion, the lexias all have to be opened separately, there is no linking from one to another. This increases the effect of how separate the lexias already are from one another. Like Seed, technically one can read the lexias in any order but the interface design encourages one to read from start to finish. The analepsis that occurs is within the lexias; again using the trope of beginning in the present before moving into the past, this time usually from the perspective of a member of the expedition writing a diary entry at night that recounts the events from earlier in the day. The term *usually* is used here because there are multiple narrators. Indeed the story is told twice, once from the perspective of the members of the expedition in short individual lexias, and then recounted again (with different details, and comments on the first telling) from a perspective of historical distance, in a long passage at the "end" of the text. The separation (and brevity) of the lexias and use of multiple different voices to recount the same events results in analepsis having to be used and re-used frequently. Despite that frequency, Coover's text has relatively few words in analepsis and prolepsis compared to the other hypertexts.

Furthermore, in both *Voyage into the Unknown* and *Seed* the usages of anachronies are confined to relatively few lexias. Figures 6.22 and 6.23 show proportionally how few of the lexias in these texts use analepsis and prolepsis. 13 of *Voyage into the Unknown*'s 78 lexias use analepsis, and 3 use prolepsis, but it has 31 analepsis tags in those 13 lexias, which means that its usages of analepsis tend to be frequent but short. The normalised frequency of analepsis tags in Coover's text is 38.61, and the overall proportion of words in analepsis is 8.71%. This underlines that, relative to the other texts in the modernist and hypertext corpora, not many of the words in

Coover's text are in analepsis, yet the tags are quite frequent, so the individual instances of analepsis are quite short. On the other end of the temporal scale, the statistics for prolepsis are so small as to be negligible. Additionally, the vast majority of this text's lexias, 65 of the 78, use no analepsis or prolepsis at all.

In *Seed* both the analepsis and prolepsis statistics are very small. In lexia terms, only 8 of Seed's 234 lexias use analepsis, and 3 use prolepsis. Whole-lexia anachronies do not occur because of the style of *Seed*. In *Seed*, the lexias flow from one to the next, but the temporal relationship between them is often unclear. The lexias are a series of impressions and insights, and are grouped into months of a summer, but within that it can be difficult to tell if one is happening before or after the lexia just left behind. The overall story is chronological, but on a lexia to lexia level it is difficult to establish chronology. Meanwhile in *Voyage into the Unknown* the lexias are not directly linked to each other so they cannot generate the whole-lexia anachronies found in some of the other hypertexts. When Coover's text does use analepsis it is within the prose.

Additionally, there is almost no prolepsis within the lexias of these two hypertexts. Even on a sentence to sentence level, they do not transition forward in time as much as some of the other hypertexts. *Victory Garden* and *The Jew's Daughter* have similarly small numbers in this respect, but *Twelve Blue*, *Uncle Roger*, and *my body - a Wunderkammer* all have more prolepsis in their prose.

Seed and *Voyage into the Unknown* use analepsis sparingly - Coover's text in short bursts within its lexias, Walsh's text almost not at all - and prolepsis barely at all. They are both visually striking texts that use design to direct the reader through the narrative. They just do not follow the linking structures that create so many of the anachronies in the other hypertexts, nor do they use anachronies within their actual prose as much as most of the other texts across the whole corpus.

The Jew's Daughter

Judd Morrissey and Lori Talley's *The Jew's Daughter* has very frequent analepsis by the standard of any text in this project's whole corpus. It has a normalised frequency of analepsis of 50.24, the second-highest after *Twelve Blue*. Contrastingly, it has the most infrequent prolepsis of any of the hypertexts, at only 0.43. Furthermore, only two of the modernist novels have

less frequent prolepsis tags than this text: *Pointed Roofs* and *To the Lighthouse*, and *To the Lighthouse* does not have any prolepsis tags at all. Morrissey and Talley's hypertext is average in terms of its proportion of words spent in analepsis, at 20.36%. As we have seen (Figure 6.3), most texts across the whole corpus tend to have a proportion of words in analepsis that is close to 20%; the exact average is 25.82%, even including *Three Lives* and *The House in Paris*, which have much more analepsis than the other texts. Meanwhile, *The Jew's Daughter* has the third-lowest proportion of words in prolepsis, and again *To the Lighthouse* is one of the texts that is lower than it in this regard, the other being *Three Lives*. Finally, of this text's 203 lexias, 127 have analepsis tags, and 2 have prolepsis tags. All of those anachronies occur within the actual prose, there are no whole-lexia analepses.

In any other hypertext, those numbers would imply that analepsis is occurring often and with many words being spent on it in the actual prose, while prolepsis almost never happens. The difference in the usage of analepsis versus prolepsis suggests a thematic obsession with the past without attention given to the future. That is true in this text, but the heavy bias towards analepsis is complicated by the fact that this text has a unique structural feature that sometimes causes the same analepsis to appear unchanged or slightly changed in successive lexias. There are no whole-lexia analepses because this text's gradually evolving lexias don't allow for that; no lexia fully consists of unique content. The structure of this text has an impact on how it is encoded, and so on the anachrony statistics. An analepsis is encoded each time it appears, even if it is identical in content to one that has already appeared. It is part of a new lexia, there are changes elsewhere in the prose of that lexia, so the analepsis is now in a new context. As a result of that, in encoding terms it is a unique instance of analepsis, regardless of the content. Morrissey and Talley's text derives frequency as much from repetition as from the initial usage of temporal disruptions. The mechanics of this text in this medium are doing something very different to modernism, and yet the effect of those mechanics is to create a repetition that is ultimately not unlike Gertrude Stein's repetition of phrases in her texts. The text is just as obsessed with the effect of past upon present as the modernist texts. In terms of content, many scenes from the past are repeated multiple times. One could say that this somewhat dilutes the heavy bias towards analepsis in the statistics, that seeing the same past events more than once makes those past events over-represented statistically. Yet obviously the repetition itself means something, otherwise it wouldn't be happening. Perhaps it represents characters working through painful memories or episodes. The repetition with slightly changing details is like a

person trying to remember an event, trying to figure out which version of possible past events is true.

A text with a similarly large amount of analepsis but almost no prolepsis is *Three Lives*. Stein's text provides a useful contrast in how it uses analepsis. It works through its characters' lives in an orderly fashion and from a removed perspective, provided by the omniscient third-person narrator, rather than the much closer, and more fractured, first-person narration of *The Jew's Daughter*. The three sections of *Three Lives* each set up the present moment before going back in one long flashback, while *The Jew's Daughter*'s usage of analepsis is much more fragmented and chaotic, with many moments from the past intermingling with narration of the present. Still, both texts are fascinated with the past and its effect on the present. In *Three Lives* the movement towards the present seems irrevocable and inevitable because of the distant narration, whereas in *The Jew's Daughter* the events of both past and present are made uncertain by the slowly shifting content of the lexias, which provide an effect that is closer to the uncertainty of memory. Both texts interrogate the past, but for different reasons, from different perspectives, and using analepsis in different ways.

In addition, the format of *The Jew's Daughter*, the way that one moves to a new lexia, invites a linear progression through those lexias; the lexias are even numbered. However, linearity means something different here than in, for example, *Voyage into the Unknown*. One does not move linearly through a plot, because usually a given lexia will contain snippets of several different events that are happening at different times and even involving different people. There can be some continuity in those sub-stories, though often there is not or they are told out of order, but certainly it cannot be said that there is overall continuity from lexia to lexia. There is just continuity in the numbers of the lexias, although if one uses the text box at the top of the page, one can view any lexia in any order, and even when one does follow the natural progression through the numbered lexias by moving one's mouse over the word that will cause the lexia to change to the next one, the sequence of the numbers itemising the lexias breaks, skipping one hundred numerals from 33 to 134, a further 30 from 172 to 203, and then another 18 from 203 to 221. So, even when one thinks one can grasp a measure of continuity as certain and simple as a sequence of whole numbers, that certainty is disrupted by the text. Additionally, there are two versions of a particular lexia. When one reaches the lexia numbered 26, some of the text appears briefly before being erased and replaced with different words. The content is different

but the number assigned to the lexia is the same, it is still called number 26.[3] Morrissey and Talley's text refuses to conform to what one expects from a hypertext or a modernist text (to which it is so clearly indebted in its fractured prose style, and its references to James Joyce). It has similarities to both styles, but ultimately executes its objectives in a unique way, using repetition in combination with analepsis, an intimate prose style and a playful structure, to create a poetic and complex text.

Victory Garden

Victory Garden is more similar to *Uncle Roger* and *Twelve Blue*, but on a much grander scale. This is a novel-length fragmented hypertext fiction. It uses analepsis and prolepsis frequently, but the statistics of that are slightly diluted by the sheer size of the text, and the fact that many of its lexias are stand-alone fragments, statements, or quotations. Many lexias narrate parts of dreams, which do not follow the same rules of time as the rest of the text. Still the text contains many fully-realised storylines, which can be followed from lexia to lexia, as had been the case with *Uncle Roger*. Like *Twelve Blue*, *Victory Garden* has many characters, but this text is so long that there is time for the characters to be more developed. Moulthrop's text has most of the elements we have been discussing as emblematic of hypertext: it jumps around in time, it is fragmented and yet features continuity between many of its lexias. It engages with memories and regrets of its characters. The reader sometimes experiences storylines out of order; you might encounter a character at a point that occurs chronologically before another point involving that character that you have already read. Other times we appear to jump a year or more forward in time to discover familiar characters in new places and jobs. We build up contexts through short strings of lexias, which add up into a timeline in the reader's mind. They are discovered at many different points along the actual continuum of story time, and one never knows when a string of links will abruptly bring one to an unexpected stand-alone aside. The people we encounter form into rounded characters over time in a nebulous fashion, and the network of lexias comes together into a whole. In that, *Victory Garden* does something

[3] In the encoding process, the issue of having two versions of the same-numbered lexia is addressed by recording both versions of the lexia, as 26a and 26b. For the purposes of this project's statistics, they count as two lexias, and their content is different. It is only the naming convention of the original and the manner by which the reader finds the lexias - one only has to move the mouse once, not twice, the second version appears unprompted - that would suggest that it is ontologically the same lexia.

modernism cannot do, and its frequent movement between different points in time is an integral part of that.

Victory Garden has a small percentage (14%) of lexias that feature any analepsis tags - similar in this regard to *Voyage into the Unknown*, and to a slightly lesser degree *Uncle Roger* (by contrast, *The Jew's Daughter*, *Twelve Blue*, and *my body - a Wunderkammer* all have analepsis tags involved in more than half of their lexias. However, prolepsis is very significant in this text, as 42.43% of lexias contain prolepsis tags of any kind. Granted, most of those tags are whole-lexia prolepses, with only 0.7% of lexias featuring prolepsis tags within them, but that alone tells us a great deal about how prolepsis is used in this text. Whole-lexia prolepses indicate continuity of story from an immediately preceding lexia via a hyperlink. It is a key structural feature, with whole-lexia prolepses providing the backbone of the many continuous stories that are found in this text.

The relative significance of prolepsis and analepsis in this text is corroborated by the proportions of the total word count spent inside those tags. Words in prolepsis make up 50.7% of this hypertext, while words in analepsis comprise only 5.9%. When most of those prolepses encompass entire lexias, it is evident that *Victory Garden*, which can be read in many orders and is radical in its use of the hypertext form for a story of this scale, is dependent on many story vignettes emerging within the whole, which have continuities of their own that flow in a more-or-less temporally linear fashion for the reader. That fact is underlined by the statement by Moulthrop himself in one of *Victory Garden*'s lexias, "About This Map," where he states that in "the detailed maps each labelled node represents a significant place in the Garden (often the beginning of a storyline). Double-click on a node to go there" (Moulthrop). The mention of storylines with specific beginnings indicates that there are specific sequences of temporally linear lexias, and these are an integral part of the project. The mention of significant places should also not go unnoticed. In a truly decentred rhizome-like text all lexias would be equal and any starting point would suffice, but Moulthrop here indicates that some lexias are more important than others as entry points for the reader and starting points of sequences.

Moulthrop's text has normalised frequencies of 19.7 for analepsis (just a little below the whole-corpus average of 26.41) and 41.46 for prolepsis, which is the second-highest figure in the corpus, with only *Uncle Roger* featuring more frequent prolepsis. The low proportion of words spent in analepsis combined with the more ordinary frequency of analepsis tags indicates that the

analepses tend to be quite short. The vast majority of those analepses (138 of the 146 analepsis tags in the text) fall within lexias. So when analepsis is used, it is usually part of the prose. Meanwhile the high frequency of prolepsis falls in line with the high proportion of words in prolepsis in underlining how important whole-lexia prolepses are in this text.

In the modernist novels in this corpus, apart from *The Sound and the Fury*, analepsis was by far the dominant tag being used, in terms of frequency and proportion of words. We are seeing in some of the hypertexts, and not least in this one, that often other tags are more significant, like prolepsis, or indeed the tag for changing narrative levels. In *Victory Garden* and *Uncle Roger* more words are spent in prolepsis than in analepsis, while in *Seed*, *my body - a Wunderkammer*, and *Voyage into the Unknown*, level tags play a large role. They will be discussed in the next main section of this chapter.

Overall hypertext trends

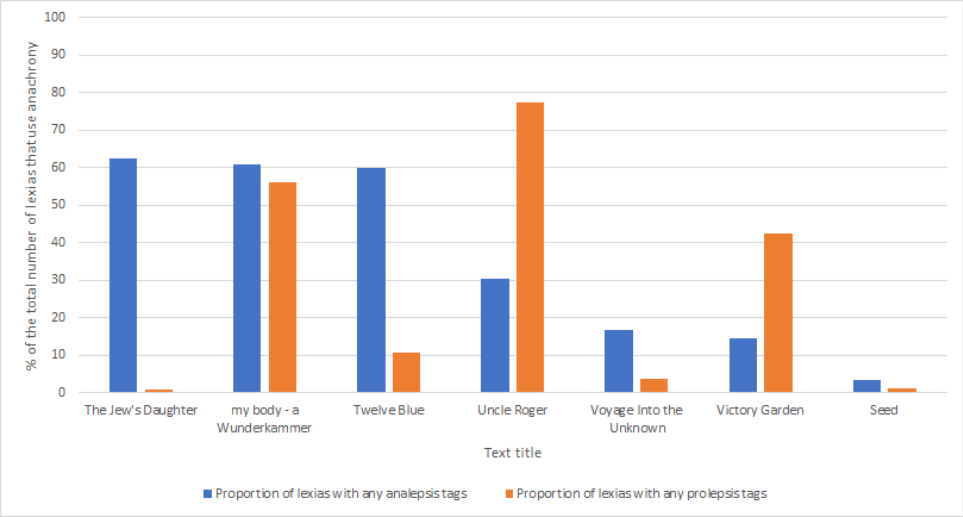

Figure 6.22: Proportion of lexias that use analepsis tags at all, and prolepsis tags at all. Some lexias use both analepsis and prolepsis.

With respect to analepsis and prolepsis, there is one more measure that can be used to compare the hypertexts against one another. It is a feature only of the hypertexts, determined by their structure; just as a linear distribution graph does not apply to the hypertexts, this measure does not apply to the modernist novels. It is the comparison of the proportions of lexias in a text that use analepsis or prolepsis at all, versus the proportions of lexias that use those techniques only within themselves, rather than the entire lexia being an instance of analepsis or prolepsis. This tells us to what degree the amount of anachrony in a hypertext is driven by the style of

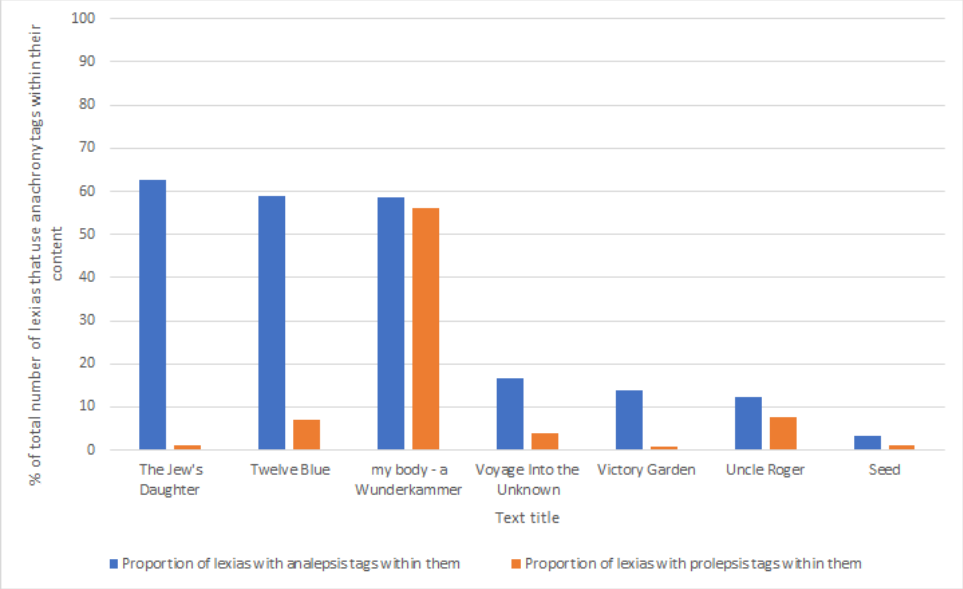

Figure 6.23: Proportion of lexias that have analepsis or prolepsis tags within them, excluding analepsis or prolepsis tags that encompass an entire lexia at once. This shows when anachronies occur within the narration of a lexia, rather than the entire lexia itself being an analepsis or prolepsis relative to the lexia the reader has previously encountered. When this criterion is applied, the figures for some texts change drastically, while others hardly change at all.

narration from sentence to sentence, rather than just by the structure of the hypertext on a macro level.

As can be seen in Figures 6.22 and 6.23, most of the hypertexts maintain a very similar proportion of lexias that use analepsis and prolepsis regardless of whether one counts whole-lexia anachronies or not. That means that these texts - *Twelve Blue*, *my body - a wunderkammer*, *Seed*, *Voyage into the Unknown*, and *The Jew's Daughter* - mainly use analepsis and prolepsis within their lexias, as part of their styles of narration. In that sense, they are similar to the modernist novels.

In *Uncle Roger* and *Victory Garden*, significant differences can be seen in their graphs depending on whether one includes whole-lexia anachronies or not. When those anachronies are excluded from consideration, *Uncle Roger* has a far lower proportion of lexias that use analepsis or prolepsis at all. Meanwhile, when the same measure is applied to *Victory Garden*, its proportion of lexias with prolepsis also sharply declines, but its proportion of lexias with analepsis does not change much. This indicates that *Uncle Roger* uses analepsis and prolepsis primarily as a structural device, using directly linked lexias that occur recognisably before or after the previous one in story time, to a greater extent than the other hypertexts. The results suggest

that *Victory Garden* does this with prolepsis, but not analepsis. In terms of deviations into the past, it functions in much the same way as the other hypertexts, and modernist novels for that matter; they emerge in the course of the prose itself. This assertion is tempered by the fact that in some cases the nature of a text prevents it from creating the kind of successive chains found in Malloy and Moulthrop's texts. Neither *Seed*, *Voyage into the Unknown*, nor *The Jew's Daughter* have the kinds of links between lexias that are found in *Uncle Roger* or *Victory Garden*, so they cannot have whole-lexia anachronies. Other times the difference is a matter of content - both *my body - a Wunderkammer* and *Twelve Blue* have links directly between lexias, they just don't use them for successive moments in story time. *my body - a Wunderkammer*'s lexias stand on their own, while *Twelve Blue* has storylines but they're quite dispersed. The links in Joyce's text tend not to bring the reader to the next event in story time; if that event is represented in another lexia, it tends to be elsewhere in the text, not linked directly. The succession emerges indirectly. This correlates with earlier statements that *Uncle Roger* and *Victory Garden*, while fragmented, have discernible storylines.

For many of the other hypertexts, the distinction between whole-lexia anachronies and anachronies within lexias does not make much difference to their statistics. When whole-lexia anachronies are excluded from the graph, we do see a swap of position between *Twelve Blue* and *my body - a Wunderkammer*, indicating that Jackson's text has a slightly greater proportion of whole-lexia analepses than *Twelve Blue* does. The difference here is minimal though. This metric is mostly useful for analysing the reasons for big changes in these figures. In the case of Uncle Roger and Victory Garden, it shows how much of their prolepsis comes in the form of successive events in storylines, as opposed to the occurrences in the other hypertexts, which emerge as part of their styles of narration, and which perhaps make them more similar to modernist narratives.

6.5 Narrative Levels

Narrative levels play a significant role in three of the hypertexts in this corpus, and a small role in one hypertext and one novel. Levels work slightly differently in each of these texts, but they have enough in common to be encoded using the same tag and discussed together in this section. Levels are significant in *Seed*, *my body - a Wunderkammer*, and *Voyage into the Unknown*, while they appear briefly in *Twelve Blue* and *Tender is the Night*. The nature of how and why those texts use narrative levels has already been discussed in Chapter 4 of this thesis so we do not

need to explain that further here, but we will instead relate those qualitative points with the data resulting from the encoding process, of how frequently these texts use changes in narrative levels, and what proportion of their word counts are spent in embedded or parallel narrative levels.

6.5.1 *Seed*

Narrative levels are more integral to Joanna Walsh's *Seed* than to any other text in this corpus, and the data will show this. This hypertext features parallel narrative levels, as has been discussed in Chapter 4. It does this by mixing paragraphs of italicised and non-italicised text to denote events happening at slightly different times. They are therefore told by a slightly different version of the narrator, and so are occurring on different and parallel, rather than embedded, narrative levels (as there is no frame narrative enclosing everything). The parts in italics have been encoded using the ⟨level⟩ tag because some lexias do not include italicised text, so within those lexias there is only one level. The ⟨level⟩ tag is introduced when there are parallel levels, and it is used to annotate whichever level is italicised. This does not imply a judgement on value or hierarchy of the levels; as stated, they are parallel. One level has to be encoded to differentiate them and determine how many words are spent in one level rather than the other; because the italicised text does not always appear, it makes sense for this to be the level that is annotated with the tag.

Relative to the total word count, 22.43% of *Seed*'s words occur in the italicised parallel level. This might seem surprisingly low, especially when one considers that the normalised frequency of the level tags in this text is 66.86. This is the highest frequency of level tags in any text. It is also a higher frequency than that of analepsis tags in any text, although *Twelve Blue* and *The Jew's Daughter* are close, at 51.37 and 50.24 respectively. Also, 55.98% of Seed's lexias feature level tags, yet 22.43% is not close to the highest proportion of words inside level tags. This again relates to the difference between non-hierarchical divisions in the prose and the need to apply an annotation to one of the pieces that result from that division. To remedy this, we must first consider more about how *Seed*'s lexias are structured.

In addition to the whole text being linear, *Seed*'s lexias are grouped into miniature series or chapters, each with a title. These series usually have three or four lexias; sometimes more, sometimes fewer. Within these series, the narration continues from one lexia to the next,

although not necessarily in a recognisable chronological order. It is more that the same general theme is being discussed, a theme that is related to the title of the series. The relevance to narrative levels is that these series can be considered self-contained narrative units, even though they span lexias. Therefore, an italicised level can count as being parallel to the text in another lexia as long as that lexia is part of the same series. Some series do not have an italicised level in any of their lexias, and this will help us to address the issue of finding the correct proportion of words in parallel levels. There are 17 such series, out of a total of 70 series in the whole hypertext. Each of those 17 series only has narration on one level, they have no parallel level. There is no other level in their series to which they can be parallel. Therefore we can consider the narration in every lexia in every other series to be on one non-hierarchical parallel level or the other, because if those series contain any italicised text at all, then by default their non-italicised text is occurring on the other parallel level. This provides a true word count of all text in parallel levels, not just the italicised one. By this measure, 75.75% of the total words in *Seed* occur in one parallel level or the other. This is now much more representative of how the narration actually works, and how great of a role narrative levels play in it. It is also now much more in line with the proportion of words in embedded levels in *my body - a Wunderkammer* and *Voyage into the Unknown*, at 63.58% and 64.54% respectively. Furthermore, we can now determine what proportion of words are on each level. Of those series of lexias in which levels are mixed, 29.61% of the words are in the italicised level, with the other 70.39% being in the non-italicised parallel level. We can now see just how powerful narrative levels are in *Seed*; when they are used, they are used very extensively.

Three-quarters of a text's words being in narrative levels, added to a normalised frequency of 66.86 implies that the use of narrative levels is essential to the text. Passages that involve a change of narrative level are frequent yet not short, and they are extensive. This amount of usage of parallel narratives results in the fact that for most of the text, multiple perspectives are presented, even from the same character. They act as a different narrator in the parallel levels because of the essential difference in experience that they have at the different points in time represented by the two narrative levels. This technique provides a sense that things are changing very fast for the protagonist. The events in her life cause uncertainty for her, and so they are narrated in an uncertain fashion in the text. This is fitting for the overwhelming and unstable nature of teenage experience. Relatedly, there might be some significance to the uneven split in the amount of words spent in the italicised and non-italicised narratives, and the

fact that italicised narratives are not used at all in some series of lexias. If the usage of parallel narratives conveys teenage confusion, then perhaps the segments with only one narrative at a time represent moments of clarity for the protagonist. It is striking that the very last series in the text uses only one narrative level; this might imply some resolution.

The usage of narrative levels in *Seed* is an innovative and evocative way of telling a story. It is certainly unique in this corpus. It is highly experimental and pushes boundaries in narrative style, even when the text appears to be linear from a macro perspective; on the level of the lexias it is not linear. The importance of visual design in the navigation of the text is also innovative. In addition, Walsh's text is narratively fragmented in a way not seen in any of the modernist texts. Of the hypertexts in this corpus, it is narratively the most different from the modernist novels.

6.5.2 *my body - a Wunderkammer*

Shelley Jackson's hypertext uses narrative levels quite extensively. In this text, the levels are embedded, not parallel. The usual pattern is that a lexia begins in the present, and then changes to the past. The segment in the past is told from the perspective of the same person as those parts in the present, but when they were younger. That narrative from the past is an analepsis, but it is also an embedded narrative level, because the younger protagonist is in effect a different narrator, because they are narrating from a different time in their life, with a different set of memories and biases. Also the embedded narration is in turn presented to the narratee by the original narrator; the higher narrator is aware that the story from the past exists, but not the other way around. That makes the narrative from the past embedded rather than parallel; the conscious re-presenting of the past story creates a change of diegetic level.

The data shows that text is very much concerned with this storytelling of the past. 63.58% of the words in the whole text are contained within the embedded narrative levels. 30 of the text's 41 lexias (or 73.17% of the lexias) contain level tags. The frame narrative is given a back seat; the main event is the stories from the protagonist's childhood. The level tags are also quite frequent, with a normalised frequency of 42.52. This indicates that the narration moves in and out of the embedded levels for reference, drawing relations between past events and the current condition of the protagonist's body. The text is partially about the act of drawing up memories after considering one's scars, tattoos, bones that have been broken. That is a kind of

storytelling, to oneself. When presented in a text like this, it is not just to oneself, the narratee is present. That creates another impetus for the telling of these stories, and indeed the prose style implies that the text is meant to be read by a third party; it is instructive, explaining things to the narratee as if for the first time. The text is fragmented in its frequent transitions in and out of embedded levels, and between past and present, and in the fact that the lexias do not narratively continue from one to the other, but there is a thematic unity in the text as a whole. Jackson's hypertext devotes most of its words and most of its lexias to storytelling about the past, and almost always provides context for those stories from the present. The usage of embedded narrative levels in this hypertext is a perfect way to address that theme.

6.5.3 *Voyage into the Unknown*

Embedded narrative levels play a similarly large role in Roderick Coover's hypertext, although they are used in a different way to *my body - a Wunderkammer*. There are multiple narrators in this text, but they are completely different entities, seemingly from different centuries, rather than versions of the same person at different times in their life. The apparently present-day narrator - a vague entity who is not identified - provides omniscient comment on the titular voyage. The embedded narration comes in the form of documents written by the crew travelling on an expedition in the nineteenth century. These diary entries and notes have no omniscience, they provide an immediate day-to-day perspective. One of the two long lexias at the end of this text is also mostly comprised of an embedded narrative. Here the frame narrative introduces a lengthy report of the voyage, purportedly published in a journal shortly after the journey took place. Apart from this, the pieces of embedded narration tend to be brief, as the lexias are brief.

Not all of this text's lexias contain prose narration. Some lexias are just non-narrative titles or names of geographic features. In terms of word count, however, narrative text dominates. 97.04% of the text's words are prose narration. For discussions of the proportions of the text's words contained in embedded levels, the non-narrative lexias make up so little of the overall word count as to be negligible. Of the text's prose narration, 64.54% of the words occur in embedded narrative. The rest is told by the frame narrator. The normalised frequency of embedded level tags in the prose narration is 31.34; not quite as frequent as Jackson's text but still substantially frequent (and higher than the average frequency of analepsis tags in the whole corpus). 23 of the

33 prose lexias (or 69.7%) feature embedded narration. All of this indicates that embedded levels occur frequently, and the instances of embedded narration are not short in the context of this text and its lexias. Coover's hypertext uses its multiple narrative voices, and its mix of fictitious found documents and present-day comments on them, to engage with the nature of how history is constructed. Some of the same events are told differently by the different narrators. There are certainly changes in tone, the journey portrayed in some accounts as heroic and in others as a miserable affair that avoided disaster by luck. The frame narrator provides wry commentary when their voice appears. The extensive use of embedded narratives, and their contrast with each other and with the frame narration, is a useful method of interrogating myth-making and history-making in the expanding United States of the nineteenth century.

6.5.4 *Twelve Blue*

Twelve Blue has just five instances of embedded narration, four of which occur in one lexia. That is the same narrative being told in four fragments, but each transition is recorded as an instance of an embedded level. In that particular lexia, entitled "sl3_2," the character Javier tells a doctor colleague about the first time he saw a dead body. This event is literally referred to as a story in the text: "He remembered the first time he saw a dead man, really saw death. It was a story he often told. This morning he had told it to the new resident" (Joyce). The narration transitions back and forth between the embedded narrative of Javier seeing some fishermen pulling a dead body from a river, and the frame narrative of the circumstances around Javier's telling of the story to his somewhat uninterested colleague. The embedded narrative is told in the first person, from Javier's perspective and in his words. The frame narrative retains the usual close third-person perspective of the rest of the text; this narrative is still focalised by Javier but not narrated by him, as we are privy to his thoughts and feelings but the speaker is some other entity. The frame narrative in this lexia includes Javier's observations of the other man's reactions while he is telling the story. At one point the embedded narration is interrupted by dialogue in the frame narrative consisting of the other man correcting a detail from the story. "'Suites,' the resident said, 'Cello suites.' So he was listening, behind the mask, and took this risk to correct the senior man. It was brave really. Suites of course" (Joyce). Moments like this reveal Javier's self-consciousness and annoyance with the other man. So, the moving back and forth between embedded and frame narrative provides an ironic counterpoint between the earnest story and the tense interaction in which it is being relayed. Eventually the

earnestness wins through in a way that, counterintuitively, forces the embedded narrative to be abandoned in order for its story to be told to the narratee of the frame narrative. While most of the story of seeing the fishermen and the body is told in the first-person, towards the end of the story the perspective switches back to third-person, no longer in the embedded narrative level even though it is still in analepsis. This is how the denouement of the story is told to the narratee of the frame narrative, as Javier first thinks the fishermen have found a dead dolphin, then realises it is a person, and retches on the riverbank. Perhaps it is Javier's vulnerability in that moment that determines that this part of the story cannot be told in the same casual way as the beginning. For a moment the half-interested colleague is forgotten, the pretence of storytelling to him is ignored, and the narration just follows Javier in the past, in his memory. In this lexia, 25.93% of the words are in an embedded level, yet the key paragraph of the story is part of that which is analepsis but not an embedded level. The lexia makes very effective usage of switching back and forth between embedded and frame narration, and ultimately the dropping of the embedded narrative in order to finish its story makes that ending more powerful. The half-interested colleague is never mentioned again, we are left just with Javier's internal reactions to his remembering. Narrative levels are very effective here both in their usage and in their absence.

The fifth and final instance of an embedded narrative level is in the lexia "sl6_12." Again this embedded narrative is referred to explicitly as a story - "One story her mother used to tell her still confused her" (Joyce) - and is a complete tale in itself. In this instance the protagonist of the lexia is upset by the recent drowning of a boy near her home. The embedded narrative that she remembers involves "a Chinese poet named Li Po who fell in love with the moon's reflection on his way home in a boat after a night of drinking plum wine. He stood up in the rocking boat and the stars spun as he reached out to embrace her, to embrace the moon, and, dizzy from the wine and the stars and the moon, he fell in and drowned" (Joyce). The protagonist does not provide her own comment during the telling of the story, it is told directly; it could be in the same words as when the protagonist's mother told it to her. It is notable that both lexias that use embedded levels in *Twelve Blue* involve drowning. The theme is not unique to those two lexias though; drowning in general is mentioned in other lexias, and the same drowned child is discussed in other lexias from the perspective of other characters. In general, water and the colour blue are frequent fascinations in this text. Structurally, in "sl6_12" the use of the embedded narrative is triggered by the events of the present, as we have seen before

with analepsis. First the frame narrative sets the scene, then the embedded story is told, then we return to the frame narrative. The embedded story here is not a memory, and so not an analepsis, as it is a fable (despite the mention of the protagonist's mother's claim that the story was true). The embedded narrative is a balm to the protagonist; we tell ourselves stories to feel better in troubled times. In the whole of *Twelve Blue*, 1.16% of the words occur in embedded levels, and the tags have a normalised frequency of 2.14. This, of course, far less than the other hypertexts mentioned here, but the usages that do exist are powerful.

6.5.5 *Tender is the Night*, and other texts

A text that uses embedded narrative levels even fewer times than *Twelve Blue* is *Tender is the Night* - it uses an embedded level precisely once. This is the story about Dr Dohmler and Devereux Warren, told by Fritz to Dick Diver. This embedded narrative comprises 1,691 words, so 1.45% of the total word count of the novel. The normalised frequency, to the extent that that statistic makes any sense when there is only one tag, is 0.09. Statistically this is not very significant. We can simply note that this embedded narrative is lengthy enough to make up a greater proportion of *Tender is the Night* than the five instances of embedded narratives do in *Twelve Blue*. In addition it is the only occurrence of a narrative level change within the main text of these modernist novels. The other two novels from this corpus where narrative level changes occur are *The Sound and the Fury* and *Three Lives*. In both of those cases the level changes occur between sections, as the different sections of those novels have different narrators. The change in narrator creates a change in narrative level, horizontally arranged rather than the vertically embedded level in *Tender is the Night*. In *The Sound and the Fury* and *Three Lives* there are no level changes within the narration of their sections.

Narrative level changes are not present at all in *Pointed Roofs*, *The House in Paris*, *The Jew's Daughter*, *To the Lighthouse*, *Uncle Roger*, or *Victory Garden*. Some of those texts feature letters or emails, but, as stated in Chapter 4, the writers of those letters are not the narrator, it is the omniscient narrator who is reporting the content of their emails, so they do not constitute a change in narrative levels.

It's interesting that *Tender is the Night* should be the only modernist novel that features narrative levels in a way that is at all similar to the hypertexts. In the prolepsis statistics there was also one modernist novel that stood alone amongst the hypertext fictions; *The Sound and*

the Fury's fragmented narrative style jumps around in time just as much as the newer texts. The similarity between *Tender is the Night* and the hypertexts is more tenuous as Fitzgerald's novel only uses an embedded level once. Still, this speaks to the narrative variety of that novel. We have earlier in this chapter discussed how the narrator of *Tender is the Night* changes at certain times, and that instances of analepsis in the novel sometimes correlate with a change of narrator or narrative style. One of those instances correlates further with this novel's one change in narrative level, the embedded narrative told by Fritz. It is a significant moment in that novel, and so notable that it should involve changes from the normal style of narration in multiple ways. In doing so it ends up becoming slightly more similar to the multitudinous styles of the hypertext fictions.

6.6 Conclusion: The relationship between modernist and hypertext narratives

This chapter's practice of combining distant and close reading shows that most of the texts in the corpus, across both genres, use temporal disruptions to a similar extent, and that the reason they do so is to narrate memory, and, in so doing, to replicate subjective experiences of the simultaneity of time. The measurement that shows the most similarity across the whole corpus is the proportion of words spent inside analepsis. Four of the six modernist novels and four of the seven hypertext fictions have a proportion of their words in analepsis that is within 15% of the average for the whole corpus, 25.82%. This is a striking level of similarity across the entire corpus. In this statistic there is not a clear difference between the modernist novels and the hypertexts. There are outliers in both genres, on the low and high ends of the scale. The proportion of words in prolepsis shows more difference between the two genres, although there are also great differences between the texts within those genres. However, it is the case that prolepsis makes up a non-trivial proportion (or, more than 1%) in five of the hypertexts but only two of the modernist novels. The main outlier in the modernist novels in this respect is *The Sound and the Fury*, which has a proportion of prolepsis words that is similar to some of the hypertexts. Part of the reason for the increase in proportion of prolepsis in the hypertexts is because of their linking structure bringing the reader forwards in time in a discontinuous fashion, but this does not account for all of the prolepsis usage in those texts. They feature forward flashes in time in their actual prose more than most of the modernist texts do, except

for Faulkner's, which matches the hypertexts in this way, suggesting a heightened narrative fragmentation in it and them.

The frequency statistics suggest increased fragmentation in the hypertexts relative to the modernist novels. The modernist novels move in and out of instances of analepsis often, but not as often as most of the hypertexts. Again, part of this is due to the discrete nature of hypertext lexias engendering whole-lexia anachronies, but the hypertexts still use anachronies more frequently in their actual prose. The frequency statistics for prolepsis are smaller than those for analepsis across the whole corpus, but the hypertexts still feature prolepsis more frequently than the modernist novels. Meanwhile, narrative levels are not used very much in these texts compared to anachronies, but they occur more in some of the hypertext fictions. As with prolepsis and *The Sound and the Fury*, there is an outlier in the modernist novels that is (in this case, only somewhat) similar to the hypertext fictions in terms of the usage of narrative levels: *Tender is the Night*. It is curious that there is such an outlier in each of these respects, perhaps novels that were ahead of their time in these specific ways, or maybe it is simply coincidence; the sample size here is very small.

The data suggests that there is a connection between these texts that goes beyond thematic similarity and is rooted in the mechanics of their narratives. The similar proportion of words spent in analepsis in most of the texts from across the whole corpus shows that those texts use narrative disruptions to a similar extent. When we follow that data to the moments of transition in the primary texts, we can see that the disruptions often driven by memory. This shows that preoccupations with the past, and the holding of moments from the past in a character's mind simultaneously with the present, affect the very narrative structure of these texts. These modernist novels and hypertext fictions divert into memory so much that it often takes up a fifth of their narratives. These texts distort the way in which they tell their stories in order to more faithfully evoke the way humans perceive time. The extent of this phenomenon in these texts, underlined by analysis of the reasons for it, is only visible through the combination of distant and close reading in which this chapter engages.

Thesis Conclusion

Research questions addressed, process, and related work

In the beginning of this project it was stated that the research questions were, firstly, whether a valid and useful system for annotating narrative time features in fiction can be developed, and secondly, whether the narratives encoded using that system can be quantitatively analysed and compared in a way that makes sense and provides useful bases for comparison. Those questions have been answered, in the affirmative, and similarities have been found between individual texts in the case study genres of modernism and hypertext. The annotation system works, makes sense, and has enabled deeper study of narrative time in fiction. Anachrony, narrative levels, and subjective narration can all be quantified. How much and how frequently the narratives in this corpus divert from chronological order has been measured. Here are the answers, and, firstly, how they were reached.

This has been a literary study using digital methods in combination with more traditional literary methods. Those literary methods - the direct application of narratology with close reading - remain important. Annotation and quantitative analysis build upon them and add further depth to our understanding of narratives in fiction. One of the key aspects that these digital methods contribute is that they allow narrative aspects to be measured with specificity over the course of an entire text. They allow one to see exactly[4] where the uses of these narrative techniques begin and end, how long they last in words, what proportion of a text's total words they comprise, and how frequently they occur. This provides a different perspective on how

[4]That exactitude is subject to subjective judgement, of course, but the construction of the annotation guidelines is designed to mitigate this as a factor. The results of the inter-annotator agreement tests run by the SANTA project show that this schema is at least somewhat usable by multiple parties on the same text to obtain the same result.

a text functions. We were always aware that a text like *To the Lighthouse* features a lot of remembering by the characters; we can now see exactly how much that happens. Knowing that gives us a stronger basis from which to return to the text and see where the remembering is happening the most, where it hardly occurs at all, and where it appears in places we did not expect. Furthermore, we can then compare that usage to other texts, modernist and hypertext (or any other genre) that are similarly obsessed with memory thematically and see if this is reflected in data through a similar proportion of the text being devoted to narrating memories, or other narrative techniques. This practice adds to our toolbox for analysing works of fiction.

The annotation process itself makes one comprehend in greater detail what exactly these narrative techniques are and how they are used in fiction. Firstly one has to define the techniques in order to turn them into tags and write the annotation guidelines. Through this process, informed by research of the structuralists who inspired this project and gave these terms their current meaning, one comes to understand analepsis as "any evocation after the fact of an event that took place earlier than the point in the story where we are at any given moment" (Genette 40)[5]. Stream of consciousness, meanwhile, is prose that is both focalised and narrated by one character, and they narrate their thoughts as they occur to them, at the speed of thought. Then, the practice in itself of applying the tags to a fiction text provides one with insights on the nature of that text. One has to think about exactly where an analepsis begins and ends, because one has to decide where to put the tags. Sometimes this can be in the middle of a sentence. More significantly, one has to decide whether something truly is an instance of analepsis; the same dilemmas occur for the other tags, like a transition of narrative levels, or uses of stream-of-consciousness prose. For example, analepsis cannot usually occur within dialogue, because that is still reported speech which is occurring in the present (unless the dialogue goes on long enough to be considered the main part of the narration). However, analepsis can occur when a story is being told in dialogue, but it is not narrated as such, and is instead narrated as an intact narrative of its own, without quotation marks. This occurs, concurrent with a change of narrative level, in the embedded narrative of Dr Dohmler, told by Franz, in *Tender is the*

[5]The terminology used by Genette here, and by the translator, Jane E. Lewin, is exemplary of how pervasive our spatialisation of time is. Genette speaks of a "point" which is "where" we are. This is a convention of how we talk about time, and is not reasonably avoidable, but it shows how accurate Bergson was when he noted how difficult it is to talk about time without metaphorising it and using the units of measurement from physical space.

Night. While that occurrence is long, an analepsis can also be as short as a few words (*any* evocation), a brief reference to the past within a sentence, as we see in *The House in Paris*, when Leopold "sat pulling at his upper lip with his thumb and finger, in the way ⟨analepsis⟩his Aunt Sally once said would spoil the mouth God had designed,⟨/analepsis⟩ staring at what he now saw from the outside" (Bowen 32)[tags added]. An analepsis can use the past perfect tense but does not always. Often an analepsis is reported by the narrator as if it is happening in the present. From the narrator's point of view, the moment from the past is effectively the present because this moment is where their attention is completely devoted. Or, in Bergsonian terms, that moment from the past is being held simultaneously in the present. Annotating texts helps one to realise all of these different variations of analepsis. Annotation, and the analysis of the data derived from that annotation, leads to fruitful close readings supported by data from distant reading. Those close readings show that analepsis is used so much throughout the corpus in order to replicate simultaneous experiences of time through disruption of the narrative's temporality. We see through examining the places in the texts where this occurs that the movement of these narrative through time are often triggered by the memories of the characters. This insight would not be possible without the data to lead us to those places in the text and to show quantitatively that the phenomenon happens to a similar degree in a majority of the texts from across the corpus.

There was space in the fields of English and Digital Humanities for this kind of annotation, because while much work had been done on narrative in novels, narrative in electronic fiction, and annotation systems for some narrative features, even including some that involved time, no system existed for annotating this specific combination of features. TimeML, NarrativeML, and ProppML provide systems for encoding some narrative features, including some related to time, but not the specific combination of tags that this project requires; they do not encompass all of analepsis, prolepsis, narrative levels, stream of consciousness, and free indirect discourse. These tags are essential for this project. There are other issues with these annotation schemes such as them being too detailed and tagging every word, making them too unwieldy for one annotator to annotate a corpus with them manually, and also less human readable. The Narrelations tool meanwhile is a positive example of how to visually represent narrative level changes, but does not account for spans of words spent in those levels, and is less detailed in its representation of anachronies. As such, a new, bespoke, annotation system was required.

It had previously been shown that quantitative work could provide fruitful analyses of modernist

texts. Some digital humanities projects have shown how quantitative methods can be useful for comparing fiction works individually and in corpora. Ramsay compared sections of *The Waves* by Virginia Woolf against each other, noting the difference in the vocabulary used in sections narrated by the different characters, and what that can tell us about those characters (12-14). Jockers has shown how to visually represent the relative similarities and differences in prose style of a corpus of nineteenth- and twentieth-century novels using cluster dendrograms (117). Clement uses visualisations of the frequency of usage of the word "one" increasing dramatically in the second half of Gertrude Stein's *The Making of Americans*, just as the usage of the word "I" becomes far less frequent. Using that graph Clement shows definite and deliberate structural change in the second half of the novel, driven by its syntax (437). This illustrates how quantitative measures can help to interrogate the structure of fiction texts, as well as the style of their prose. Text-mining does not work for this project because the narrative concepts being addressed require too much critical interpretation for a computer program to detect, but these practices show the insights that can be gained from comparing data gleaned from fiction works, and then applying those insights to further literary study of those novels.

Narrative, modernism and hypertext

Narratology had expanded beyond its initial applications in studies of short stories and novels, to encompass electronic fiction. Useful studies of electronic literature have been done by writers such as Espen Aarseth - who explored the role of the reader and the power of the choices available to them in electronic fiction - and by Eileen Herbert-Goodall and Daniel Punday, who both analyse the place of the link and the nature of narrative in hypertext. Marie-Laure Ryan explores the boundaries of narrativity and interactivity. Her work also addresses the possible worlds of the links and narrative strands not chosen by a reader. The reader of a hypertext is aware that there are other narrative possibilities that they have not encountered yet, and may never encounter; the story they read is one of many possibilities. Ultimately it appears that the reader really does not have very much agency in hypertext fiction. All the possible readings, no matter how numerous, exist latently in the text and have been constructed, through the placement of the links, by the author. Meanwhile, modernist fiction has been described as being part of an impressionist turn in art more widely. This meant artists forsook objective realism in favour of more truthful representations of subjective human experience. This was

manifested in fiction with subjective narration such as stream of consciousness, which was new, as well as free indirect discourse, which had been used before. While stories have often been told out of chronological order for as long as narratives have existed, anachronies can also be seen as a useful tool in representing the subjective experience of memory more faithfully. The nature of time in modernism has been explored by critics, but not using annotation and quantitative analysis of that annotated text. Modernism and hypertext have been compared for their narrative fragmentation, and their commitment to making a "significant formal break with the traditions that preceded" them (Rettberg 55), while still seeking "inspiration and validation in a literary past" (Pressman 2). The two genres also both have "narrative complexity, and an aesthetic of difficulty" (Pressman 9). It makes sense for them to be case studies used for the trialling of the annotation scheme. Analepsis, prolepsis, and most of the other narrative techniques present in the tags have been used in fiction for centuries, so any two genres can be compared, but it makes sense to compare these two to measure the degree of similarity between them, to see the similarities in their actual prose, in how they deal with and disrupt narrative time.

Time was an important concern in society at the time of modernist fiction. Philosophy and science proposed new ways of thinking about the passage of time. Einstein said that time was relative, that it didn't always flow at the same speed, depending on the conditions. James and Husserl wrote about streams of thought and the subjective experience of time. Most importantly for this thesis, Bergson described conflicting subjective experiences of time: durée and simultaneity. Durée is what happens when we cease to consciously think about time and just exist in the present. This causes our experience of time to be a flowing, uninterrupted continuum. Simultaneity occurs when we think about time, spatialise it and divide it artificially into distinct moments, and hold those moments from the past in our minds together with the present moment. Simultaneity is closer to how we experience time day to day, obsessed with memories of the past, and rarely able to fully exist in the flow of the present. Simultaneity is also much more relevant to the fiction in this corpus. Analepsis is essentially the holding of moments from the past in the present, so simultaneity happens very frequently throughout fiction. Durée can be applied to stream of consciousness, but even then it is often interrupted with instances of simultaneity as characters briefly remember moments from the past before getting back into the flow of the present. Conflicting with these evolved considerations about subjective time, the world in the early twentieth century was increasingly bound by regulated public time.

Greenwich Mean Time had been introduced in the second half of the nineteenth century, with standardised time needed in order to make train timetables function. There were more clocks in public places, and after the First World War more people transitioned from carrying pocket watches to wearing wrist watches, placing a ticking representation of structured, divisible, and standardised time on their bodies. Technology also collapsed notions of time though, as faster travel and communication made tasks that used to take a long time take much less time, or even made them instantaneous, as in the case of the telephone. Technology was changing rapidly, as was philosophical and scientific thinking about time, and all of this seeped into the fiction of the time.

We have seen the influence of these perspectives on time in the fiction in this corpus. Simultaneity is present in all of the analepsis, but particular examples can be found in *The House in Paris*, as discussed in Chapter 2 of this thesis. Aside from the whole middle part of the novel being a long instance of analepsis, there are many short instances of analepsis throughout the whole novel. We see this done very poetically when Henrietta vividly remembers what Mme Fisher's room looked like when she had been there earlier that afternoon, when in the present she is speaking with Naomi and Leopold and hears "[t]hree sharp taps on the ceiling made Miss Fisher and Henrietta anxiously look up. (Henrietta, seeing the twist of incense, grey twilight across the foot of the bed)" (Bowen 216). This is an example of a theme of the novel; it is a text that is "much preoccupied with repetition and return" (Corcoran 81). This shows how analepsis can be analysed without annotation and quantification; those methods add depth to the argument, but there are points to be made even without them. The influence of faster communication is also present in Bowen's novel, as it is in *Tender is the Night*, with telephone calls being involved in both novels, with varying degrees of importance to the plot. Trains also play an important role in *The House in Paris*, as the fast ravel links between London, Paris, and southern France allow for the plot where Henrietta can travel from London to Paris overnight, spend some of the day in Paris, and then continue her journey. The swiftness of this travel, with the scheduled break in the middle because of the train timetables and the scheduling of the next train creating the gap of a few hours, allows for the Fishers' house to become a liminal space, through which the characters in the novel pass on a transformative day. We see further instances of analepsis within sentences in *The Sound and the Fury*, such as when Benjy is at the branch with Luster, and in the midst of describing the current scene remembers being there with Roskus and his siblings, so the analepsis occurs upon the second "and" in the sentence in

this example. After Luster tells Benjy to hush in the present, Benjy narrates that "I hushed and got in the water and Roskus came and said to come to supper and Caddy said, It's not supper time yet I'm not going" (Faulkner 11). This, like the example from Bowen, is a radical representation of the subjective experience of time, of the mind of a character holding a moment from the past in their mind together with the present. This is true simultaneity.

We can also gain some insights into the nature of narrative time in hypertexts using similar traditional literary approaches. Analepsis is present within the sentence-to-sentence narration in hypertext just as it is in modernist fiction. We see this for example in *Twelve Blue* when the character Javier remembers the first time he saw a dead body; the narration weaves between his remembering of this past event and the context of a conversation about it in the present. This practice of weaving is the same as many uses of the technique in modernist fiction, and fiction generally. This makes it comparable to other genres of fiction. However, hypertext also has a type of anachrony that is unique. That is the analepsis or prolepsis created when a lexia links to another lexia that is clearly before or after it in story time. The link is a key aspect of hypertext fiction, the thing that distinguishes it from other genres of fiction, so it is not surprising that it should engender unique circumstances in narrative time. Links between lexias carry meaning, as George Landow writes, they "signify coherent, purposeful, and above all useful relationships. From which follows that the very existence of links conditions the reader to expect purposeful, important relationships between linked materials" (153). That coherence and purpose imply that when a lexia links to another lexia that clearly comes before or after it in story time, that transition is coherent and purposeful. That means that the lexia to which a link goes is entirely an analepsis or prolepsis relative to the lexia that has just been left behind. As has been stated, the term *anachrony* does not describe the moment of the temporal transition, it describes the entire span of text that takes place backwards or forwards in time. We see this occurring in practice in *Uncle Roger* when the lexia "blue 9" links to the lexia "blue 10." It is stated in the text that the events in "blue 10" occur one week before the events of "blue 9," making "blue 10" entirely analepsis. These kinds of phenomena are visible simply from reading and analysing the text in a traditional manner. Annotation and quantification can help us to explore these phenomena with greater depth.

This thesis has questioned whether hypertext can be considered part of the modernist genre, and whether anything published after the mid-twentieth century can be considered modernism. Dirk Van Hulle writes convincingly that "the experiments of the modernists prefigure literary

aesthetics in the digital age. Notably the tendency to deviate from a linear narrative structure anticipates non-linear forms of writing and reading that characterize hyperfiction" and that the reasons for modernist texts narrating in this way was because rather than "representing or mirroring reality they tried to convey the experience of reality, resulting in complex studies of the ways in which human beings deal with time and space" (139-40). He also states that "the modernist attempts to convey the *experience* of time and space resulted in formal experiments that may be regarded as proto-hypertexts" (140). However, modernist fiction prefiguring hypertext or sharing certain narrative characteristics does not mean that hypertext fiction literally is modernist fiction. James and Seshagiri write that modernism is unavoidably bound to the late nineteenth and early twentieth centuries because it is a response to that particular context; it is "historically conditioned and culturally specific" (88). Fiction that comes from a later period and utilises modernist aesthetics can be called metamodernism, but it cannot be true modernism. Hypertext does not quite fit that categorisation. Some hypertexts take inspiration from modernism, but they remain their own genre because of their networked form, their incorporation of postmodern influences as well as modern ones, and their commitment to forging a new path using new technology. The ways in which hypertext has been clearly inspired by modernism is evident in its narrative strategies, specifically its disruption of narrative time, and, crucially, the reasons why hypertexts narrate in this way: to achieve a more faithful representation of subjective human experience. Most of the hypertexts in this corpus are very personal and often deal with memory. Using analepsis to do so is a definite similarity between modernism and hypertext.

When we consider phenomena like anachrony and subjective narration, it is important to also take narrative levels into account, as they are sometimes used in combination with those other techniques. As a result, they too must be annotated. In order to annotate accurately, what does and doesn't constitute a narrative level change must be defined. In this way we see another instance of the annotation process creating a better understanding of the techniques involved, which allows for a richer analysis of the primary texts. A narrative level change can be identified by a change of narrator or narratee, or both, because these things correspond with a change from extra-diegetic (told by an entity outside the story) to intra-diegetic (told by a character in the story) narration or vice-versa, which for Genette constitutes a change in narrative level. Narrative levels can be broadly categorised by their use of either vertical or horizontal structures. Vertical narrative levels are narratives that are nested inside one another, stories within stories.

Horizontal narrative levels are parallel narratives that are separate but not nested; they have no frame narrative and all occur on an equal level with each other. Horizontal narrative levels can be see in this corpus in the sections of *The Sound and the Fury* and *Three Lives* for example, and in the parallel narratives contained in many of the lexias of *Seed*. Vertically-arranged narrative levels are found in this corpus in *my body - a Wunderkammer*, in which anecdotes from the past are presented inside lexias that otherwise contemplate the narrator's body in the present.[6] Several other texts in the corpus use vertical and horizontal narrative levels. For the purposes of flexibility and ease of use, this project's XML schema does not distinguish between vertical and horizontal narrative levels. It simply allows one to use the level tag and include an optional attribute detailing the degree of narrative level (integers that increase with the depth of the narrative level, with 1 being the highest level, or the frame narrative, and 2 being nested within that narrative, and so on). Narrative levels relate closely to narrative time disruption techniques, and understanding them and how they work in concert with anachronies is key to understanding how these experimental texts function. That understanding is further increased with the use of annotation.

Method and results

Annotation is essential because it allows for greater depth of analysis of the texts, and is in itself a useful exercise because it makes the annotator make judgements about what narrative techniques are being used in a text, and how they are being used. The quantification of the resultant annotated text further drives analysis of the primary texts and allows for comparisons between them that could not be achieved otherwise. Studies from scholars like Clement, Ramsay, and Jockers, as discussed in Chapter 1, have shown that quantitative methods can add value to literary discussions of fiction. This project required annotation, but no existing annotation scheme covered the full range of narrative characteristics addressed by this project, so a new system had to be created. XML made sense as a basis for the system because of its flexibility and its familiarity to me and to other potential users and readers. The tags are simple, and flexible in that they can be combined in any order. They are defined in detail in Chapter 5. The tags cover spans of words because that enables deeper and more comprehensive analysis, that of the numbers of words contained within the tags. In the analysis of the data gleaned

[6] One can see here how narrative level changes and analepses sometimes combine.

from the annotated text in this project, the frequency of tags and proportions of the words of texts that are contained within those tags are of key importance, as we have seen in Chapter 6 and we will summarise again now.

The results of the quantitative analysis of the data shows similarities and differences between individual texts, but not between the two genres as wholes. The results initially suggested that there was a clear difference between modernism and hypertext, in that analepsis occurs much more frequently in the hypertexts than in the modernist novels. However, in the rest of the results, there was not a clear difference between the two genres in terms of proportions of words spent in analepsis. Instead, there were similarities in this respect in several of the texts from across the whole corpus. Anachrony is the focus of the analysis because it is the most significant in relation to narrative time disruptions, but the other tags are used in the analysis as well. There are evident similarities between some of the modernist texts and some of the hypertext fictions, as they quantifiably use some techniques with similar proportion and frequency, as well as the overt thematic similarities. Many of the texts in the whole corpus obsess over time and memory, and use the narrative techniques we discuss to convey the experience of the characters of those things. The data leads us to significant places in the texts where narrative time is disrupted, and we are able to see that the reason is to convey that subjective experience.

To explore the statistics in more depth, we first turn to frequency of tags. A greater frequency of anachrony tags means that a text is moving in and out of anachrony more often. This means that the text is more temporally fragmented, and is potentially more obsessed with the past thematically. The reasoning for this is that if these texts endeavour to represent a subjective experience of time, then they represent minds that fly back and forth between past and present a great deal, possibly frantically so. The data suggests a greater temporal fragmentation in these hypertexts. In the majority of the texts in the corpus, and on average, analepsis and prolepsis both occur more frequently in the hypertexts than in the modernist texts. In an average of all the modernist novels, the normalised frequency of analepsis is 15.66, and 3.59 for prolepsis. In the hypertext fictions, the average normalised frequency of analepsis is 35.63, and 31.47 for prolepsis. The form of hypertexts makes them slightly more likely to have more frequent anachrony than the modernist texts, but they still use those techniques very frequently in their actual prose. The modernist text in which prolepsis is most frequent is *The Sound and the Fury*, which is the modernist novel that is most similar to the hypertexts in its narrative fragmentation, mainly in its first two sections, which transition through time with a rapidity

that is similar to a hypertext. It seems that the sentence-to-sentence narration of the hypertexts is itself more temporally fragmented than that of the modernist novels, as they are more likely to use prolepsis. The modernist novels tell stories in a relatively linear manner, with many references to the past, but not to the future. The hypertexts, with their networks of lexias comprising their overall structures, are perhaps more free to have nonlinear structures within those lexias. There is one other formal consideration, in that the brevity of hypertext lexias also affects frequency as tags have to be opened and closed in the same lexia, they cannot span many pages like in a modernist novel. Still, both analepsis and prolepsis tags remain more frequent in the hypertexts. It makes sense for analepsis to be frequent in modernist novels because they are so clearly thematically obsessed with the past. It follows that if they are more frequent in the hypertexts, then they might be even more preoccupied with the past, more chaotic and experimental, and, even, more representative of simultaneity. To see in greater detail how much all of the texts represent simultaneity through memory, we need to analyse what proportion of their words these texts spend in anachrony.

In terms of proportion of words spent within anachrony, there are not overall differences between one genre and another but rather great similarities between many texts across the two genres, and some differences in others. Seven of the thirteen texts in the corpus have a similar proportion of their words in analepsis: all close to 20%. The other texts are outliers on one end or the other. Both the conforming texts and the extremes of high or low proportions bear discussion. The seven texts with proportions of words in analepsis close to 20% are *The Sound and the Fury*, *Tender is the Night*, *Uncle Roger*, *Twelve Blue*, and *The Jew's Daughter*, also including *To the Lighthouse* and *Pointed Roofs* which have 13.28% and 15.45% of their words in analepsis respectively. These texts, if not their entire genres, are quite similar in their treatment of narrative time. They show that there is not an absolute difference in how the two genres deal with narrative time.

The three hypertexts that are part of that group of seven - *Uncle Roger*, *Twelve Blue*, and *The Jew's Daughter* all feature frequent and short instances of analepsis. By comparison, the modernist novels stay in analepsis for longer when they use it. Yet, despite their form and the high frequency and brevity of their analepses, those three hypertexts feature a similar proportion of words in analepsis to the four modernist texts on that list. One can see here a connection that spans across the two genres, in those texts. The seven texts, despite their differences, spend a similar proportion of their narratives in the past. They share a similar commitment to

representing memory, and show that in the word count that they spend in memory. In doing so, they enact a practice of simultaneity, holding those memories of the characters together with narration of the present. These seven texts practice simultaneity in a way that is measurably similar to each other. An advantage of using proportions of word counts within tags as well as the frequency of the tags is that the extent of that similar usage of analepsis can be shown.

The outliers with a high proportion of words in analepsis are *Three Lives* and *The House in Paris*, which is unsurprising given their structures, as discussed in Chapter 6. Surprisingly, *Tender is the Night* does not have a particularly high proportion of words in analepsis, even though it has a similar structure to *The House in Paris*; there is a long flashback in the middle of each novel. Fitzgerald's novel only features 20.88% of its words in analepsis, compared to 66.07% in Bowen's text. The past looms large in *The House in Paris* and the novel gives the past its due proportion of words, whereas in *Tender is the Night* the past is comparatively skipped over. Much like its protagonist, it tries to focus more on the present. Here we see how this novel's form mimics its content, and the annotation and quantitative analysis has helped us to realise just how much this is so.

Meanwhile, we can see that *Seed*, *Voyage into the Unknown*, and *Victory Garden* have very low proportions of their words in analepsis. *Seed* has almost no words in analepsis, while *Voyage into the Unknown* has a mix of some very short and two very long instances of analepsis. That text is highly inconsistent and fragmented, which fits the story that it tells and re-tells; again we see form mimicking content and the quantitative analysis helping us to see the extent to which this is manifested in temporal fragmentation of the narrative. *Victory Garden* has a similar frequency of analepsis tags to the modernist novels, but a lower proportion of its words within those tags. It does have a high proportion of words in prolepsis though: 51%. This is a result of its structure, in which storylines are told through series of lexias. This makes the text not as fragmented as one might expect. 50.7% of the words in *Victory Garden* are spent in prolepsis, compared to only 5.9% in analepsis. This text is dependent upon the relatively linear storylines that emerge though these series of lexias. The data shows how for a hypertext, it is surprisingly linear, but in small stretches, rather than as a whole narrative. In this way the quantitative analysis has provided the background for another useful argument about the temporal disruptions of a text relative to the other texts in the corpus.

Analysis of individual texts indicates that there are further fruitful observations to be gained

about individual texts in themselves and when compared one-on-one using this methodology. For instance, when we examine the distribution of words in analepsis over length of *To the Lighthouse*, as in Figure 6.14, we can see that there are some spikes in the first section, then a very low proportion of words in analepsis in the second section, followed by much more frequent spikes in the final section. The increased proportion of words in analepsis in the final section of the novel is due to characters remembering more then, including many memories of events from the time of the first section. The time they spent together and with Mrs. Ramsay in that section impacted the characters left alive in the final section, and remains with them. In the hypertexts, the statistics tells us that *Uncle Roger* has the highest frequency of any of the texts for both analepsis and prolepsis, partly due to its form, with many lexias taking place recognisably before or after the one which linked to them. However, *Twelve Blue* has a similarly high frequency of analepsis but far less frequent prolepsis. The storylines are more broken up in this text, compared to the more linear progressions in *Uncle Roger*. In both of these hypertexts, the reader can read them in any order, but if one does follow the set order, *Twelve Blue* is measurably more nonlinear than *Uncle Roger* is. The data allows us to see this; the extent of the temporal narrative disruption is made more evident by the data.

Future work and conclusion

In future work this schema will be used on more expansive corpora. I will continue to use it, potentially combined with automatic analysis of texts, in order to for instance assess the amount of correlation between the usage of the past perfect tense - detected by a natural language processing program - with the manually annotated instances of analepsis. It is hoped that this schema will be used in the future by others to do analysis like that in this project, and perhaps combine this system with other annotation systems to produce new results. In a future project some of the challenges addressed in the introduction could be overcome. The limitation of a single annotator requiring the corpus size to be small, could not be changed in this project (and did not have to be, as fruitful results were attained from the small corpus) but it is possible that this annotation scheme could be used by a bigger project with a more sizeable budget on a larger corpus by more annotators. That would also open possibilities for further analysis of inter-annotator agreement beyond the gamma measures gleaned by SANTA from usage on another small corpus. A more racially diverse corpus could be compiled based on the

more comprehensive focus of modernist studies in recent years, and the annotation scheme could be used on other genres, with potential insights to be gained in any fiction that experiments with time, from contemporary fiction that uses stream of consciousness like the work of Eimear McBride, to autofiction, postmodern fiction, or genre fiction like science fiction. There is no current solution for annotating depth of analepsis (how far back in time the narrative travels) with consistent accuracy, but this thesis has shown that analysing the usage of analepsis even without that measure still provides very useful results. The usage of the past-perfect tense, on the other hand, is something that can be detected with accuracy by a machine, and measuring the changing proportion of its correlation with analepsis in different texts will be part of my future work.

Overall, in the results of this project, we see varying degrees of fragmentation in all the texts in the corpus. Initially the frequency statistics seem to suggest a difference between the two genres, with hypertext more fragmented or simultaneous than modernism, but the proportion of words in anachrony presents a more nuanced picture, showing similarities and differences between novels and hypertexts across the whole corpus. The seven texts that are very similar in their proportion of words spent in the past imply that those have a similar usage of narrative time disruption, and so a similar amount of simultaneity occurring. Even in the outliers, there are similarities in fragmentation and the reasons for the disruptive narrative strategies, with content influencing the form. We can say that there are similarities in the usage of analepsis, and so the amount of representation of simultaneous experiences of time in those seven texts. This data allows us to see that some narrative strategies endure, even in very different kinds of texts.

This thesis has shown that the process of making the tags is useful, as is applying them in annotation, and analysing the resultant annotated text. These practices show that texts from different genres can indeed be compared using these tags, which provides fruitful results that broaden literary discussions of those texts. From these results, we can see that some patterns cross genres and time periods; there are links in the prose, the narration on the sentence level, in how many of these texts narrate time. Disruptions of narrative time in fiction can represent the subjective lived experience of time, of simultaneity, of memories being held in one's consciousness along with the present. This project's combination of distant and close reading shows that these modernist texts and hypertext fictions use narrative time disruptions to a similar extent to evoke these subjective experiences of time.

Appendix

Schema in XML

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified">
<xs:element name="text">
  <xs:complexType mixed="true">
    <xs:sequence>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="analepsis" type="xs:string"/>
        <xs:element name="prolepsis" type="xs:string"/>
        <xs:element name="soc">
            <xs:complexType mixed="true">
                <xs:sequence>
                  <xs:choice minOccurs="0" maxOccurs="unbounded">
                    <xs:element name="analepsis" type="xs:string"/>
                    <xs:element name="prolepsis" type="xs:string"/>
                  </xs:choice>
                </xs:sequence>
              <xs:attribute name="PERS" type="xs:string"/>
            </xs:complexType>
        </xs:element>
        <xs:element name="fid">
          <xs:complexType mixed="true">
               <xs:sequence>
```

```
        <xs:choice minOccurs="0" maxOccurs="unbounded">
          <xs:element name="analepsis" type="xs:string"/>
          <xs:element name="prolepsis" type="xs:string"/>
        </xs:choice>
      </xs:sequence>
    <xs:attribute name="PERS" type="xs:string"/>
  </xs:complexType>
</xs:element>
<xs:element name="level">
  <xs:complexType mixed="true">
        <xs:sequence>
          <xs:choice minOccurs="0" maxOccurs="unbounded">
            <xs:element name="soc">
              <xs:complexType mixed="true">
                  <xs:sequence>
                      <xs:choice minOccurs="0" maxOccurs="unbounded">
                        <xs:element name="analepsis" type="xs:string"/>
                        <xs:element name="prolepsis" type="xs:string"/>
                      </xs:choice>
                    </xs:sequence>
                  <xs:attribute name="PERS" type="xs:string"/>
                </xs:complexType>
            </xs:element>
            <xs:element name="fid">
              <xs:complexType mixed="true">
                  <xs:sequence>
                    <xs:choice minOccurs="0" maxOccurs="unbounded">
                      <xs:element name="analepsis" type="xs:string"/>
                      <xs:element name="prolepsis" type="xs:string"/>
                    </xs:choice>
                  </xs:sequence>
                <xs:attribute name="PERS" type="xs:string"/>
```

```
                    </xs:complexType>
                  </xs:element>
                </xs:choice>
              </xs:sequence>
              <xs:attribute name="DEGREE" type="xs:integer"/>
            </xs:complexType>
          </xs:element>
        </xs:choice>
      </xs:sequence>
    </xs:complexType>
</xs:element>
</xs:schema>
```

Link to annotated corpus

The complete XML files of every annotated text in the corpus can be found at:

https://github.com/kearnsed/Measuring-Moments-Annotating-and-Quantifying-Narrative-Time-Disruptions-in-Modernism-and-Hypertext

Additional tables, complementary to Chapter 6

Title	Total words	Analepsis		Prolepsis	
		Total analepsis tags	Analepsis normalised frequency	Total prolepsis tags	Prolepsis normalised frequency
Modernist novels					
Pointed Roofs	55,719	123	22	2	<1
To the Lighthouse	70,060	140	20	0	0
The Sound and the Fury	96,488	187	19	182	19
The House in Paris	79,565	130	16	10	1
Tender is the Night	108,784	119	11	5	<1
Three Lives	86,131	45	5	5	<1
Hypertext fictions					
Uncle Roger	13,808	84	61	204	148
Twelve Blue	23,358	120	51	12	5
The Jew's Daughter	46,181	232	50	2	<1
Voyage Into the Unknown	8,029	31	39	3	4
my body - a Wunderkammer	17,806	46	26	37	21
Victory Garden	102,519	202	20	425	41
Seed	39,011	11	3	4	1

Table 6.4: Frequency statistics for analepsis and prolepsis, all texts. Arranged in descending order by normalised frequency of analepsis tags, and grouped into modernist and hypertext sections.

Title	Total words	Level		Stream of consciousness		Free indirect discourse	
		Level tags	Level normalised frequency	SOC tags	SOC normalised frequency	FID tags	FID normalised frequency
Modernist novels							
To the Lighthouse	70,060	0	0	0	0	278	40
The Sound and the Fury	96,488	4	<1	2	<1	0	0
Tender is the Night	108,784	1	<1	1	<1	227	21
The House in Paris	79,565	0	0	0	0	217	27
Pointed Roofs	55,719	0	0	0	0	199	36
Three Lives	86,131	3	<1	0	0	0	0
Hypertext fictions							
Seed	39,011	252	65	0	0	0	0
Voyage Into the Unknown	8,029	47	59	0	0	0	0
my body - a Wunderkammer	17,806	81	45	0	0	0	0
Victory Garden	102,519	50	5	0	0	41	4
Twelve Blue	23,358	5	2	0	0	0	0
The Jew's Daughter	46,181	0	0	0	0	0	0
Uncle Roger	13,808	0	0	0	0	0	0

Table 6.5: Frequency statistics for all other tags, all texts. Level is the most-used tag here, so the texts have been arranged in descending order by normalised frequency of level tags, and, again, grouped into modernist and hypertext sections.

Title	Total word count	Analepsis		Prolepsis	
		Words in analepsis	Percentage of words in analepsis	Words in prolepsis	Percentage of words in prolepsis
Modernist novels					
Three Lives	85,643	65,142	76%	62	<1%
The House in Paris	79,565	52,570	66%	969	1%
The Sound and the Fury	96,488	21,020	22%	53123	55%
Tender is the Night	108,784	22,714	21%	133	<1%
Pointed Roofs	55,719	8,606	15%	45	<1%
To the Lighthouse	70,060	9,304	13%	0	0%
Hypertext fictions					
my body - a Wunderkammer	17,806	6,886	39%	2897	16%
Uncle Roger	12,918	3,182	25%	9538	74%
Twelve Blue	23,087	5,344	23%	1418	6%
The Jew's Daughter	45,570	9,279	20%	40	<1%
Voyage Into the Unknown	7,562	659	9%	160	2%
Victory Garden	98,182	5,801	6%	49775	51%
Seed	37,686	264	<1%	138	<1%

Table 6.6: Percentages of words in analepsis and prolepsis, all texts. Arranged in descending order by percentage of words in analepsis, and grouped into sections for modernist novels and hypertext fictions.

Title	Total Word Count	Analepsis			Prolepsis		
		Words in Analepsis	No. of Ana Tags	Avg Ana Length	Words in Pro	No. of Pro tags	Avg Pro Length
All texts	739,070	210,771	1,453	145	118,298	891	133
All modernist novels	496,259	179,356	730	246	54,332	204	266
All hypertexts	242,811	31,415	723	43	63,966	687	93
All texts except *Three Lives*	653,427	145,629	1,421	102	11,8236	886	133
All modernist novels except *Three Lives*	410,616	114,214	698	164	54,270	199	273

Table 6.7: Average analepsis and prolepsis length for all texts, and grouped by genre. *Three Lives* is then excluded because of its far greater number of words in analepsis than any other text. This shows how much that one novel affects the overall statistics for average analepsis length.

Title	Av Page/Lexia Length	Avg Ana as % of Avg Pag/Lx Length	Avg Pro as % of Avg Page/Lexia Length
All texts	260	56%	51%
All modernist novels	341	72%	78%
All hypertexts	191	23%	49%
All texts except *Three Lives*	246	42%	54%
All modernist novels except *Three Lives*	322	51%	85%

Table 6.8: Average anachrony length proportional to average page and lexia length, categorised using the same groups as Table 7.

Works Cited

Aarseth, Espen J. *Cybertext: Perspectives on Ergodic Literature.* Baltimore: JHU Press, 1997.

Bal, Mieke. *Narratology: Introduction to the Theory of Narrative.* 4th edition, University of Toronto Press, 2017.

Bell, Alice. *The Possible Worlds of Hypertext Fiction.* Palgrave Macmillan, 2010.

Bergson, Henri. *Time and Free Will.* Translated by F.L. Pogson, George Allen & Unwin, 1950.

Bolter, Jay David. *Writing Space: Computers, Hypertext, and the Remediation of Print.* Routledge, 2001.

Bordwell, David, and Kristin Thompson. *Film Art: An Introduction.* 8th edition, McGraw-Hill, 2008.

Bowen, Elizabeth. *The House in Paris.* Anchor House, 2002.

Bru, Sascha. "Avant-Garde Nows: Presentist Reconfigurations of Public Time." *Modernist Cultures* 8.2 (2013): 272-287.

Clement, Tanya. "The Story of One: Narrative and Composition in Gertrude Stein's *The Making of Americans*." *Texas Studies in Literature and Language* 54.3 (2012): 426-448.

Conrad, Joseph. "Heart of Darkness." *Project Gutenberg*, 2 Mar. 2018, `https://www.gutenberg.org/files/219/219-h/219-h.htm`.

Coover, Robert. "The End of Books." *The New York Times Book Review*, 21 June 1992, http://www.nytimes.com/books/98/09/27/specials/coover-end.html?mcubz=3.

Coover, Robert. "Literary Hypertext: The Passing of the Golden Age." *Nick Montfort*, 1999, http://nickm.com/vox/goldenage.html.

Coover, Roderick. "Voyage Into the Unknown." *Electronic Literature Collection Vol. 2*, 25 May 2008, `http://collection.eliterature.org/2/works/coover_voyage/VoyageIntoTheUnknown/`.

Corcoran, Neil. *Elizabeth Bowen: The Enforced Return.* Clarendon Press, 2004.

Eisenberg, Joshua, and Mark Finlayson. "A Simpler and More Generalizable Story Detector Using Verb and Character Features." *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing*, Association for Computational Linguistics, 2017, pp. 27082715. ACLWeb, `doi:10.18653/v1/D17-1287`.

Ensslin, Astrid, and Lyle Skains. "Hypertext: Storyspace to Twine." *The Bloomsbury Handbook of Electronic Literature*, edited by Joseph Tabbi, Bloomsbury Academic, 2018, pp. 295-310.

Eve, Martin Paul. *Close Reading with Computers: Textual Scholarship, Computational Formalism, and David Mitchell's* Cloud Atlas. Stanford University Press, 2019.

Faulkner, William. *The Sound and the Fury: A Norton Critical Edition.*. 1929. Edited by David Minter, 2nd ed., W. W. Norton & Company, 1994.

Faulkner, William. *The Sound and the Fury: A Hypertext Edition.* Edited by R.P. Stoicheff et al., 2003, http://drc.usask.ca/projects/faulkner/moved/main/.

Fernihough, Anne. "Consciousness as a Stream." *The Cambridge Companion to the Modernist Novel*, edited by Morag Shiach, Cambridge University Press, Cambridge, 2007, pp. 65-81. Cambridge Companions to Literature.

Fielding, Heather. "Kipling's Wireless Impressionism: Telecommunication and Narration in Early Modernism." *Modern Fiction Studies* 61.1 (2015): 24-46.

Fitzgerald, F. Scott. *Tender is the Night.* Penguin Classics, 2010.

Fludernik, Monika. "Histories of Narrative Theory (II): From Structuralism to the Present." *A Companion to Narrative Theory.* Ed. James Phelan and Peter J. Rabinowitz. John Wiley & Sons, 2008. 36-59.

Fludernik, Monika. "The Linguistic Illusion of Alterity: The Free Indirect as Paradigm of Discourse Representation." *Diacritics*, vol. 25, no. 4, 1995, pp. 89-115. JSTOR, doi:10.2307/465183.

Genette, Gérard. *Narrative Discourse: An Essay in Method.* Cornell University Press, 1980.

Gillies, Mary Ann. *Henri Bergson and British Modernism.* McGill-Queen's University Press, 1996.

Gius, Evelyn, et al. "A Shared Task for the Digital Humanities Chapter 2: Evaluating Annotation Guidelines." *Journal of Cultural Analytics*, Dec. 2019. culturalanalytics.org, https://culturalanalytics.org/article/11193-a-shared-task-for-the-digital-humanities-chapter-2-evaluating-annotation-guidelines.

Gunn, Daniel P. "Free Indirect Discourse and Narrative Authority in 'Emma."' *Narrative*, vol. 12, no. 1, 2004, pp. 35-54.

Hackman, Paul. "'I Am a Double Agent': Shelley Jacksons Patchwork Girl and the Persistence of Print in the Age of Hypertext." *Contemporary Literature*, vol. 52, no. 1, June 2011, pp. 84-107. Project MUSE, doi:10.1353/cli.2011.0013.

Hammond, Adam, Julian Brooke, and Graeme Hirst. "Modeling Modernist Dialogism: Close Reading with Big Data." *Reading Modernism with Machines: Digital Humanities and Modernist Literature.* Ed. Shawna Ross and James OSullivan. London: Palgrave Macmillan, 2016. 49-78.

Hayles, N. Katherine. "Combining Close and Distant Reading: Jonathan Safran Foer's 'Tree of Codes' and the Aesthetic of Bookishness." *PMLA*, vol. 128, no. 1, Modern Language Association, 2013, pp. 226-31.

Hayles, N. Katherine. *Electronic Literature: New Horizons for the Literary.* University of Notre Dame Press, 2008.

Hayles, N. Katherine. *Writing Machines.* MIT Press, 2002.

Herbert-Goodall, Eileen. "Morphing Technologies, Changing Literacies: The Reshaping of Narrative in a Digital World." *Storyworlds: A Journal of Narrative Studies* 7.1 (2015): 1-20.

Herman, David. *Emergence of Mind: Representations of Consciousness In Narrative Discourse In English.* U of Nebraska Press, 2011.

Herman, David. "Histories of Narrative Theory (I): A Genealogy of Early Developments." *A Companion to Narrative Theory.* Ed. James Phelan and Peter J. Rabinowitz. John Wiley & Sons, 2008. 19-35.

Herman, David. "Storytelling and the Sciences of Mind: Cognitive Narratology, Discursive Psychology, and Narratives in Face-to-Face Interaction." *Narrative* 15.3 (2007): 306-334. Web. 21 Feb. 2017.

Jackson, Shelley. "my body - a Wunderkammer." *Electronic Literature Collection*, 1997, `http://collection.eliterature.org/1/works/jackson__my_body_a_wunderkammer/index.html`.

Jahn, Manfred. "Narrative Levels." *Narratology: A Guide to the Theory of Narrative*, May 2017, `http://www.uni-koeln.de/~ame02/pppn.htm#N2.4`.

James, David. "Introduction: Mapping Modernist Continuities." *The Legacies of Modernism: Historicising Postwar and Contemporary Fiction*, edited by David James, Cambridge University Press, 2011, pp. 1-20.

James, David. *Modernist Futures: Innovation and Inheritance in the Contemporary Novel.* Cambridge University Press, 2012.

James, David, and Urmila Seshagiri. "Metamodernism: Narratives of Continuity and Revolution." *PMLA*, vol. 129, no. 1, Jan. 2014, pp. 87100. mlajournals.org (Atypon), `doi:10.1632/pmla.2014.129.1.87`.

James, William. *Psychology: Briefer Course.* New York: H. Holt & Co, c1920. Internet Archive, `http://archive.org/details/psychologybriefe00willuoft`.

Jockers, Matthew. *Text Analysis with R for Students of Literature.* Springer, 2014.

Joyce, James. *Ulysses.* Edited by Hans Walter Gabler et al., Vintage, 1986.

Joyce, Michael. "Twelve Blue." *Eastgate*, 1996, `http://www.eastgate.com/TwelveBlue/Twelve_Blue.html`.

Kearns, Edward. "Annotation Guideline No. 2: For Annotating Anachronies and Narrative Levels in Fiction." *Journal of Cultural Analytics*, Nov. 2019, https://culturalanalytics.org/article/11200-annotation-guideline-no-2-for-annotating-anachronies-and-narrative-levels-in-fiction.

Keen, Suzanne. "Levels: Realms of Existence." *Narrative Form*, edited by Suzanne Keen, Palgrave Macmillan UK, 2003, pp. 108-15. Springer Link, doi:10.1057/9780230503489_8.

Kemp, Simon. "The Inescapable Metaphor: How Time and Meaning Become Space When We Think about Narrative." *Philosophy and Literature*, vol. 36, no. 2, 2012, pp. 391-403. Project MUSE, doi:10.1353/phl.2012.0028.

Kern, Stephen. *The Culture of Time and Space 1880-1918.* Cambridge: Harvard University Press, 2003.

Kilian, Eveline. "Alternative Temporalities: Queer Time in Marcel Prousts A La Recherche Du Temps Perdu and Dorothy Richardsons Pilgrimage." *Modernist Cultures* 10.3 (2015): 336-356.

Landow, George P. *Hypertext 3.0: Critical Theory and New Media in an Era of Globalization.* Johns Hopkins University Press, 2006.

Levenson, Michael. *Modernsim.* New Haven: Yale University Press, 2011.

Lindberg, Erik D. "Returning the Repressed: The Unconscious in Victorian and Modernist Narrative." *Narrative*, vol. 8, no. 1, 2000, pp. 66-86.

Malloy, Judy. "Artist's Statement." *Electronic Literature Collection Vol. 3*, 2016, http://collection.eliterature.org/3/works/uncle-roger/statement.html.

Malloy, Judy. "Uncle Roger." *Electronic Literature Collection Vol. 3*, 1986, http://collection.eliterature.org/3/works/uncle-roger/.

Mani, Inderjeet. *Computational Modeling of Narrative.* Morgan & Claypool, 2013.

Mathet, Yann, et al. "The Unified and Holistic Method Gamma (γ) for Inter-Annotator Agreement Measure and Alignment." *Computational Linguistics*, vol. 41, no. 3, Sept. 2015, pp. 437-79. ACLWeb, doi:10.1162/COLI_a_00227.

Mattison, Laci. "Nabokov's Aesthetic Bergsonism: An Intuitive, Reperceptualized Time." *Mosaic: A Journal for the Interdisciplinary Study of Literature*, vol. 46, no. 1, Mar. 2013, pp. 37-52. Project MUSE, doi:10.1353/mos.2013.0006.

McEnery, Tony, and Andrew Hardie. *Corpus Linguistics: Method, Theory and Practice*. Cambridge University Press, 2011.

McKenna, Wayne, and Alexis Antonia. "'A Few Simple Words' of Interior Monologue in Ulysses: Reconfiguring the Evidence." *Literary and Linguistic Computing* 11.2 (1996): 55-66.

McLoughlin, Kate. "Moments of Insight in Long Novels by Henry James and Dorothy Richardson." *Modernist Cultures* 10.3 (2015): 299-315.

Miller, Laura. 'www.claptrap.com'. *The New York Times*, 15 Mar. 1998, `https://archive.nytimes.com/www.nytimes.com/books/98/03/15/bookend/bookend.html?_r=1&oref=slogin`.

Moretti, Franco. "Network Theory, Plot Analysis." *New Left Review*, no. 68, 2011, pp. 80-102.

Morrissey, Judd, and Lori Talley. "The Jew's Daughter." *The Jew's Daughter*, 2000, `http://www.thejewsdaughter.com/`.

Moulthrop, Stuart. *Victory Garden*. Eastgate Systems, 1992.

Moulthrop, Stuart. "You Say You Want a Revolution? Hypertext and the Laws of Media." *Postmodern Culture*, vol. 1, no. 3, Jan. 1991. Project MUSE, doi:10.1353/pmc.1991.0019.

Niederhoff, Burkhard. "Focalization." *The Living Handbook of Narratology*, `https://www.lhn.uni-hamburg.de/node/18.html`. Accessed 3 Sept. 2019.

Pier, John. "Narrative Levels (Revised Version; Uploaded 23 April 2014)." *The Living Handbook of Narratology*, 23 Apr. 2014, `https://www.lhn.uni-hamburg.de/node/32.html`.

Pressman, Jessica. *Digital Modernism: Making It New in New Media*. Oxford University Press, 2014.

Prince, Gerald. *Narratology: The Form and Functioning of Narrative*. Mouton Publishers, 1982.

Punday, Daniel. "Narration, Intrigue, and Reader Positioning in Electronic Narratives." *Storyworlds: A Journal of Narrative Studies* 4.1 (2012): 25-47.

Punday, Daniel. "Space across Narrative Media: Towards an Archaeology of Narratology." *Narrative* 25.1 (2017): 92-112. Web. 10 Feb. 2017.

Ramsay, Stephen. *Reading Machines: Toward an Algorithmic Criticism.* Champaign: University of Illinois Press, 2011.

Reeve, Jonathan. "A Macro-Etymological Analysis of James Joyce's *A Portrait of the Artist as a Young Man. Reading Modernism with Machines: Digital Humanities and Modernist Literature.* Ed. Shawna Ross and James OSullivan. London: Palgrave Macmillan, 2016. 203-222.

Rettberg, Scott. *Electronic Literature.* Polity Press, 2018.

Richardson, Dorothy. *Pilgrimage I: Pointed Roofs.* Virago, 2002.

Rimmon-Kenan, Shlomith. *Narrative Fiction: Contemporary Poetics.* Routledge, 1983.

Rose, Shirley. "The Unmoving Center: Consciousness in Dorothy Richardson's 'Pilgrimage."' *Contemporary Literature*, vol. 10, no. 3, 1969, pp. 366-82. JSTOR, doi:10.2307/1207571.

Ross, Shawna. "Introduction." *Reading Modernism with Machines.* Ed. Shawna Ross and James OSullivan. London: Palgrave Macmillan, 2016, pp. 1-14.

Ryan, Marie-Laure. "From Narrative Games to Playable Stories: Toward a Poetics of Interactive Narrative." *Storyworlds: A Journal of Narrative Studies* 1.1 (2010): 43-59. Project MUSE. Web. 13 Jan. 2017.

Ryan, Marie-Laure. "Possible Worlds." *The Living Handbook of Narratology.* 27 Sept. 2013. Web. 8 Feb. 2017.

Saurí Roser, et al. *TimeML Annotation Guidelines Version 1.2.1.* 31 Jan. 2006, `https://catalog.ldc.upenn.edu/docs/LDC2006T08/timeml_annguide_1.2.1.pdf`

Schmid, Wolf. "Narratee." *The Living Handbook of Narratology*, 22 Jan. 2013, `https://www.lhn.uni-hamburg.de/node/60.html`.

Schwan, Hannah, et al. "Narrelations Visualizing Narrative Levels and Their Correlations with Temporal Phenomena." *Digital Humanities Quarterly*, vol. 13, no. 3, Oct. 2019.

Sinclair, May. "The Novels of Dorothy Richardson." *The Egoist*, vol. 5, no. 4, 1918, pp. 57-9.

Showalter, Elaine. "On Hysterical Narrative". *Narrative*, vol. 1, no. 1, 1993, pp. 24-35.

"The Sound and the Fury Folio Illustrated Book." *Folio Society*, 20 May 2012, `https://web.archive.org/web/20120520093848/http://www.foliosociety.com/book/SAF/sound-and-the-fury`.

Stein, Gertrude. *Three Lives.* Penguin Books USA, 1990.

Van Dijk, Cedric. "Time on the Pulse: Affective Encounters with the Wristwatch in the Literature of Modernism and the First World War." *Modernist Cultures* 11.2 (2016): 161-178.

Van Hulle, Dirk. "Hypertext and Avant-Texte in Twentieth-Century and Contemporary Literature." *A Companion to Digital Literary Studies*, edited by Ray Siemens and Susan Schreibman, Wiley-Blackwell, 2013, pp. 139-61.

Verhagen, Marc, and James Pustejovsky. "The TARSQI Toolkit." *Proceedings of the Eighth International Conference on Language Resources and Evaluation (LREC12)*, European Language Resources Association (ELRA), 2012, pp. 2043-2048. ACLWeb, `http://www.lrec-conf.org/proceedings/lrec2012/pdf/656_Paper.pdf`.

Walsh, Joanna. "Seed." *Editions At Play*, 2017, `https://seed-story.com/`.

Willand, Marcus, et al. "A Shared Task for the Digital Humanities Chapter 3: Description of Submitted Guidelines and Final Evaluation Results." *Journal of Cultural Analytics*, Dec. 2019. culturalanalytics.org, https://culturalanalytics.org/article/11194-a-shared-task-for-the-digital-humanities-chapter-3-description-of-submitted-guidelines-and-final-evaluation-results.

Woolf, Virginia. "Modern Fiction." *The Essays of Virginia Woolf. Volume 4: 1925 to 1928*, edited by Andrew McNeille, The Hogarth Press, 1984.

Woolf, Virginia. *To the Lighthouse.* Harcourt, 1981.

Woolf, Virginia. "Typescript of 'Time Passes."' *Woolf Online*, edited by Pamela L. Caughie et al., `http://www.woolfonline.com/?node=content/image/gallery&project=1&parent=2&taxa=17`. Accessed 24 Oct. 2019.

Yarlott, W. Victor H., and Mark A. Finlayson. "ProppML: A Complete Annotation Scheme for Proppian Morphologies." *7th Workshop on Computational Models of Narrative (CMN 2016)*, edited by Ben Miller et al., vol. 53, Schloss DagstuhlLeibniz-Zentrum fuer Informatik, 2016, p. 8:1-8:19. Dagstuhl Research Online Publication Server, doi:10.4230/OASIcs.CMN.2016.8.