Characteristics of Early Narrative Experience:  
Connecting Print and Digital Game

by

Krystina S. Madej

MAPW, Kennesaw State University, 2001
BFA, Concordia University, 1972

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

In the
School of Interactive Arts and Technology
of
The Faculty of Applied Science

©Krystina S. Madej 2007

SIMON FRASER UNIVERSITY
Fall 2007

All rights reserved. This work may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.
Approval

Name: Krystina S. Madej
Degree: PhD, Interactive Arts
Title of Research Project: Characteristics of Early Narrative Experience: Connecting Print and Digital Game

Examinining Committee:
Chair: Dr. Tom Calvert
Professor, School of Interactive Arts and Technology

Dr. John Bowes
Senior Supervisor
Professor, School of Interactive Arts and Technology

Dr. Leith Davis
Supervisor,
Associate Professor, English Department

Ron Wakkary
Supervisor
Associate Professor, School of Interactive Arts and Technology

Jim Bizzochi
Supervisor
Assistant Professor, School of Interactive Arts and Technology

Dr. Magy Seif El-Sasr
Internal Examiner
Assistant Professor, School of Interactive Arts and Technology

Dr. Margaret Mackey
External Examiner
School of Library and Information Studies
University of Alberta

Date Defended/Approved: 2020
Declaration of
Partial Copyright Licence

The author, whose copyright is declared on the title page of this work, has granted to Simon Fraser University the right to lend this thesis, project or extended essay to users of the Simon Fraser University Library, and to make partial or single copies only for such users or in response to a request from the library of any other university, or other educational institution, on its own behalf or for one of its users.

The author has further granted permission to Simon Fraser University to keep or make a digital copy for use in its circulating collection (currently available to the public at the "Institutional Repository" link of the SFU Library website <www.lib.sfu.ca> at: <http://ir.lib.sfu.ca/handle/1892/112>) and, without changing the content, to translate the thesis/project or extended essays, if technically possible, to any medium or format for the purpose of preservation of the digital work.

The author has further agreed that permission for multiple copying of this work for scholarly purposes may be granted by either the author or the Dean of Graduate Studies.

It is understood that copying or publication of this work for financial gain shall not be allowed without the author's written permission.

Permission for public performance, or limited permission for private scholarly use, of any multimedia materials forming part of this work, may have been granted by the author. This information may be found on the separately catalogued multimedia material and in the signed Partial Copyright Licence.

While licensing SFU to permit the above uses, the author retains copyright in the thesis, project or extended essays, including the right to change the work for subsequent purposes, including editing and publishing the work in whole or in part, and licensing other parties, as the author may desire.

The original Partial Copyright Licence attesting to these terms, and signed by this author, may be found in the original bound copy of this work, retained in the Simon Fraser University Archive.

Simon Fraser University Library
Burnaby, BC, Canada

Revised: Fall 2007
STATEMENT OF ETHICS APPROVAL

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

(a) Human research ethics approval from the Simon Fraser University Office of Research Ethics,

or

(b) Advance approval of the animal care protocol from the University Animal Care Committee of Simon Fraser University;

or has conducted the research

(c) as a co-investigator, in a research project approved in advance,

or

(d) as a member of a course approved in advance for minimal risk human research, by the Office of Research Ethics.

A copy of the approval letter has been filed at the Theses Office of the University Library at the time of submission of this thesis or project.

The original application for approval and letter of approval are filed with the relevant offices. Inquiries may be directed to those authorities.

Bennett Library
Simon Fraser University
Burnaby, BC, Canada

Last revision: Summer 2007
Abstract

This dissertation presents a new outlook on children’s early experience of print narrative as they develop their narrative perceptions. It positions this experience as an important element in their positive engagement with narrative gameplay.

Narratives help children shape their experience and develop a worldview. Books have long brought children the best of past and present understandings. Today, digital media, particularly video games, play a significant part in children’s lives. Though games have the same potential as books to bring world experience to children, the breadth of stories they currently provide is small. To encourage narrative development in games, this dissertation examines the narrative perception children bring with them to gameplay, and identifies similarities between early print narrative and game narrative experience.

Young children’s earliest encounters with print narrative are based in a multimodality that includes orality, visual literacy, performance, and interactivity, and embrace a range of experiences that are socially constructed. The perception young children construct of narrative privileges these rich experiences, rather than the conventional forms of narrative they are introduced to formally when they enter school, but which adults consider the norm. This perception forms the gestalt children bring with them to gameplay. Narrative in games encompasses the multimodal and interactive nature of digital media. The result falls outside traditional narrative forms but shares characteristics with early print narrative experience. Both experiences are social, interactive, engaging, multimodal, and spatial. They also provide for agency and transformation. This similarity allows children to embrace the new digital medium readily.

Knowing these connections provides children’s authors and game developers with an understanding they can share, and from which children can benefit. Children’s authors gain a new perspective about writing in interactive environments, and a possible direction for their future work. Game developers gain a better understanding of the characteristics of narrative experiences that engage children, and an affirmation of the relevance of narrative for games. This common understanding provides a stepping-stone for the collaborative design of more diverse narrative game experiences for children.
Dedication

In one's mature years, one forgets the books that one reads, but the stories of childhood leave an indelible impression, and their author always has a niche in the temple of memory from which the image is never cast out to be thrown into the rubbish-heap of things that are outgrown and outlived.

Howard Pyle, 1911

Dedicated to my mother,

who read stories to me,

and to my children,

to whom I read stories.
Acknowledgements

I want to acknowledge all who, throughout the centuries, have created stories of our world for children to enjoy, and all who value these stories, and bring them to our children.

I offer my thanks to the faculty, staff, and my fellow students at SFU's School of Interactive Arts and Technology who have combined to create a stimulating synergy for our research field. Thank you to Dr. John Bowes for his indefatigable questioning of my approach and the rationale behind it, and his persistence in keeping me on the narrow road in an interdisciplinary research area. Thank you to the members of my committee: Jim Bizzocchi, for unfailingly bringing new ideas on game narratives to our discussions, and encouraging me to push the boundaries of narrative; Ron Wakkary, for sharing his extensive theoretical understanding of the historical literary research and the empirical studies conducted; and Dr. Leith Davis, for her enlightened approach to narrative genres outside her discipline of English, and her consistent and supportive mentoring. The insights of this interdisciplinary committee challenged and strengthened my work.

In particular I want to thank Jim Budd, my spouse as well as my colleague, whose research in interaction design has been an important resource for my work, and whose support has encouraged its evolution in new directions.

Special thanks go to my three children, Nicola, Michael, and Daniel Budd for their encouragement, and for their dedication to trying every digital game in which I showed an interest. Without their enthusiastic support my research work would not have been possible.

I would also like to thank Tom Calvert, Professor Emeritus, who continues to provide his knowledge and experience to SIAT; Jon Driver, Dean of Graduate Studies at SFU, whose invaluable advice smoothed my way numerous times, and Newton Lee, founder of ACM's Computers in Entertainment magazine, for his encouragement and his support of my work.

Thank you to all who have inspired and helped me along the way, in particular, the TechBC cohort with whom I shared discussions about narrative and games, and a great many other topics as well, including Joel Flynn, Douglas Grant, Susan Kozel, Steve DiPaulo, and Rob Woodbury; scholars in other departments at SFU who have shared their wealth of knowledge, Habiba Zaman, Colette Colligan, Adam Holbrook, Suzanne de Castell; and the angels of process, Allison Neil, Joyce Black, Desiree Nazareth, and Tiffany Powell, who helped with all the details.
## Contents

*Approval* .................................................................................................................. ii  
*Abstract* ..................................................................................................................... iii  
*Dedication* .................................................................................................................. iv  
*Acknowledgements* .................................................................................................... v  
*Contents* ...................................................................................................................... vi  
*Figures* ........................................................................................................................ viii  

**Chapter 1. Connecting Children's Print Narrative and Digital Game Narrative** ........ 1  
1.1. The Problem: Championing Meaningful Narrative in Games .............................. 3  
1.2. Theoretical Footings ............................................................................................. 12  
1.3. Common Terms .................................................................................................... 17  
1.4. Chapter Overview ................................................................................................. 22  

**Chapter 2. The Process of Inquiry** ........................................................................ 25  
2.1. Unequal Encounters ............................................................................................. 25  
2.2. Methodology .......................................................................................................... 28  
2.3. Research Process and Strategies ......................................................................... 31  

**Chapter 3. Child Development** ............................................................................ 39  

**Chapter 4. Perspectives on Narrative** ................................................................. 47  
4.2. Global Perspective: Narrative Turn ..................................................................... 48  
4.3. Literary Perspective ............................................................................................... 51  
4.4. Narrative Concepts in Schools ............................................................................ 64  
4.5. Different Paradigms .............................................................................................. 70  

**Chapter 5. Children's Narrative and Ways of Making Meaning** ......................... 74  
5.1. The Role of Narratives ........................................................................................... 74  
5.2. Providing for Social and Cultural Learning ......................................................... 75  
5.3. Narrative Literacy: Learning to Read ................................................................... 101  
5.4. Current Observations ........................................................................................... 105  
5.5. Characteristics of Print Narrative Experience ..................................................... 116  

**Chapter 6. Changing Media** ............................................................................... 123  
6.1. Digital Narrative ................................................................................................... 124  
6.2. Children's Digital Environments ......................................................................... 130  
6.3. Just Games ........................................................................................................... 139  
6.4. Characteristics of Narrative Game Experience .................................................... 148  

**Chapter 7. Connecting Narrative and Game** ....................................................... 163  
7.1. Research Analysis ................................................................................................ 164  
7.2. Conclusions .......................................................................................................... 167  
7.3. Implications of Findings ....................................................................................... 169
Appendices .......................................................................................................................... 172
Appendix A. At Home with Games .................................................................................. 173
Appendix B. Homer's Iliad .............................................................................................. 184
Appendix C.1. Reading Grade-Level Expectations ......................................................... 185
Appendix C.2. Oral Language Resource Book ............................................................... 187
Appendix D. Preliminary Questionnaire for Caregivers/Teachers ................................. 188
Appendix E.1. Young Children's Narrative Experience Observation 1 ...................... 189
Appendix E.2. Young Children's Narrative Experience Observation 2 ....................... 191
Appendix F. Children's Narrative Resources .................................................................. 193

Bibliography ...................................................................................................................... 194
## Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 4.1</td>
<td>Aristotle's narrative structure represented today</td>
<td>51</td>
</tr>
<tr>
<td>Figure 4.2</td>
<td>Traditional narrative structure</td>
<td>61</td>
</tr>
<tr>
<td>Figure 4.3</td>
<td>Language Arts story structure curriculum</td>
<td>66</td>
</tr>
<tr>
<td>Figure 5.1</td>
<td>A mystery play in the village square</td>
<td>77</td>
</tr>
<tr>
<td>Figure 5.2</td>
<td>Hornbooks and battledores were used until the nineteenth century</td>
<td>79</td>
</tr>
<tr>
<td>Figure 5.3</td>
<td>Orbis Sensualium Pictus: Visible World</td>
<td>80</td>
</tr>
<tr>
<td>Figure 5.4</td>
<td>Queen Mab or The Tricks of Harlequin</td>
<td>97</td>
</tr>
<tr>
<td>Figure 5.5</td>
<td>Dean Thomas' &quot;toy&quot; books</td>
<td>98</td>
</tr>
<tr>
<td>Figure 5.6</td>
<td>The History of Little Fanny</td>
<td>99</td>
</tr>
<tr>
<td>Figure 5.7</td>
<td>Little Red Riding Hood and Winnie the Pooh</td>
<td>99</td>
</tr>
<tr>
<td>Figure 5.8</td>
<td>Carved alphabet in ivory box circa 1800</td>
<td>102</td>
</tr>
<tr>
<td>Figure 5.9</td>
<td>Hand-made alphabet cards from The Jane Johnson Collection</td>
<td>103</td>
</tr>
<tr>
<td>Figure 5.10</td>
<td>Story experience activities - Preschool</td>
<td>109</td>
</tr>
<tr>
<td>Figure 5.11</td>
<td>Story Experience Activities - Preschool</td>
<td>110</td>
</tr>
<tr>
<td>Figure 5.12</td>
<td>Learning about sequence, character, and setting</td>
<td>113</td>
</tr>
<tr>
<td>Figure 5.13</td>
<td>The Snowy Day: Storyline</td>
<td>115</td>
</tr>
<tr>
<td>Figure 5.14</td>
<td>Examples of story maps for The Snowy Day</td>
<td>115</td>
</tr>
<tr>
<td>Figure 5.15</td>
<td>A child sitting on her father's lap, reading</td>
<td>117</td>
</tr>
<tr>
<td>Figure 5.16</td>
<td>Early print narrative experience practices</td>
<td>121</td>
</tr>
<tr>
<td>Figure 5.17</td>
<td>A basic hypertext system</td>
<td>125</td>
</tr>
<tr>
<td>Figure 5.18</td>
<td>Luesebrink's Califia</td>
<td>126</td>
</tr>
<tr>
<td>Figure 5.19</td>
<td>Adventure</td>
<td>127</td>
</tr>
<tr>
<td>Figure 5.20</td>
<td>Mystery House</td>
<td>127</td>
</tr>
<tr>
<td>Figure 5.21</td>
<td>King's Quest</td>
<td>128</td>
</tr>
<tr>
<td>Figure 5.22</td>
<td>Temple of Apshai by Epyx</td>
<td>129</td>
</tr>
<tr>
<td>Figure 5.23</td>
<td>Coleco's ADAM</td>
<td>131</td>
</tr>
<tr>
<td>Figure 5.24</td>
<td>Inigo Gets Out</td>
<td>132</td>
</tr>
<tr>
<td>Figure 5.25</td>
<td>Sierra's Mixed-Up Mother Goose</td>
<td>132</td>
</tr>
<tr>
<td>Figure 5.26</td>
<td>The Tale of Benjamin Bunny</td>
<td>135</td>
</tr>
<tr>
<td>Figure 5.27</td>
<td>Sam and Joe take on the job of tracking down Pigmoose</td>
<td>138</td>
</tr>
<tr>
<td>Figure 5.28</td>
<td>Mario the Plumber</td>
<td>140</td>
</tr>
<tr>
<td>Figure 5.29</td>
<td>Legend of Zelda</td>
<td>141</td>
</tr>
<tr>
<td>Figure 5.30</td>
<td>Infocom's advertising</td>
<td>144</td>
</tr>
<tr>
<td>Figure 5.31</td>
<td>Television advertising from the 1980s</td>
<td>152</td>
</tr>
<tr>
<td>Figure 5.32</td>
<td>The Wii advertising today's interactivity</td>
<td>153</td>
</tr>
<tr>
<td>Figure 5.33</td>
<td>The basic game playing system from Coleco and Atari</td>
<td>153</td>
</tr>
<tr>
<td>Figure 5.34</td>
<td>Controllers circa 1980s and today</td>
<td>154</td>
</tr>
<tr>
<td>Figure 5.35</td>
<td>The Coleco Telstar Arcade Controller (1976) and their Marksman (1980)</td>
<td>154</td>
</tr>
<tr>
<td>Figure 5.36</td>
<td>Game screen from SuperMario64 and advertisement for Wii</td>
<td>158</td>
</tr>
<tr>
<td>Figure 5.37</td>
<td>Mario in space</td>
<td>159</td>
</tr>
<tr>
<td>Figure 5.38</td>
<td>Characteristics of children's game experience</td>
<td>161</td>
</tr>
<tr>
<td>Figure 5.39</td>
<td>Early print narrative and narrative game experience: shared characteristics</td>
<td>166</td>
</tr>
<tr>
<td>Figure 5.40</td>
<td>PageCraft</td>
<td>171</td>
</tr>
</tbody>
</table>
Chapter 1. Connecting Children’s Print Narrative and Digital Game Narrative

This chapter introduces the purpose of this dissertation, presents an overview of early print narrative and game narrative experience, provides commentary on related work, definitions of major terms used, and introduces subsequent chapters.

Preamble

November 2005

Peter and the Wolf

Liv and Halle flit like birds, fluttering their arms as the trill of the flute brings the sound of the meadow to their story time. Kyle and Isabella, as the duck and the cat, hiss at each other, arguing and waving their arms as Eric and Logan, the slinking wolves, sneak closer behind the pretend trees. Rasa and Jason, intent hunters, stalk the wolves with their air rifles. Many howls and much running about later, all settle down to finish listening to this audio tape of Prokofiev’s story; the oboe, the clarinet, and the french horns crescendo as the narrator concludes the final scene.

“How come Peter’s in the woods?” “Is that the bird?” When Alexi, the teacher, reads from the picture book later in the afternoon and shows illustrations of the meadow, the bird, the duck, the cat, and the wolf she is peppered with questions. Trills, meows, and hisses accompany the children’s questions as they add their voices to the story. Now it is Graham and Eric who jump up and become hunters, stalking, and pointing their rifles at the wolf that Peter is about to trick.

“For chase me, chase me,” screams Liv, jumping up and down on the playground, “I’m the duck.” The wolf chases the bird, the duck, and the cat to much twittering, quacking, and hideous meowing. No hunters here, only a rampaging wolf can satisfy the eager yen for the thrill of being chased.¹

For young children, the narrative experience is more than sitting and reading print text, silently and alone. It is more than the intersection of author and reader. It is listening, looking, and participating. It is an embodying of ideas, a continuous acting on impressions that children have of ideas and images they encounter in a space they create. The nature of narrative, as young children enjoy it, is as a living and changing creative experience that captures for them the quality of the human spirit, and provides them with an understanding of the world in which they live.

¹ These excerpts are from an observation of preschool children conducted in November 2005. See Chapter Two.
Introduction

Thirty-five years ago a digital narrative environment that children could easily access did not exist. It was only in 1972 that William Crowther wrote the first text interactive fiction game *Colossal Cave Adventure*. He said of the game, "I decided I would fool around and write a program that was a re-creation in fantasy of my caving, and also would be a game for the kids, and perhaps some aspects of the Dungeons and Dragons that I had been playing."²

Today, computer and video game software units top seven billion dollars in sales in the U.S. alone.³ In 2001, 92% of all children and adolescents between the ages of 2-17 played video games.⁴ On any given day, 30% of all kids 2-18 played a video game and spent an average of just over an hour playing.⁵ By 2003, 48% of children six and under used a computer and 30% played video games. Of these, 33% were hopping up to the computer by themselves, 23% were loading their own CDROMs, and 12% were asking for specific websites while surfing the NET.⁶ Digital media are increasingly a point of intersection and interpretation between children and the world, one that children themselves embrace with enthusiasm. Games, like books, provide stories for children to experience. Both these media offer children a space filled with text, visuals, and the interactive potential to make stories their own through a wide range of multimodal activities within a social enclave of parents, friends, and caregivers. But while books introduce children to a vast world through the stories they offer, games limit their narrative offering to a slim, often violent, selection. They have the potential to engage children with a much broader narrative world than they do currently.

Scholars have approached digital narrative environments from a number of perspectives, each of which has added to our understanding of the complexity and potential of this new medium. In *Writing Space*, Jay Bolter considers hypertext to be an evolving text environment, a remediation of print.⁷ In *Computers and Theatre*, Brenda Laurel identifies the connection between the dynamic of theatre and the interactivity of computers.⁸ In *The Language of New Media*, Lev Manovich shows us the parallels between film/cinema and new media.⁹

---

³ 2007 sales until May show an increase of 47% over 2006, at $5 billion. From GameDailyBiz at http://biz.gamedaily.com
Different from the adult experience of print, theatre, or film, young children's print narrative experience is essentially an interactive experience; it is also multimodal and constructed through social interaction with parents, caregivers, and peers. These characteristics are the ones it most obviously shares with digital game experience. The connection between these two media experiences is significant, yet it has been little explored. There are compelling reasons to consider a new perspective, to draw connections between children's early print narrative experience and their digital narrative experience. When acknowledged and understood, children's early experience of print narrative, which is based in centuries of evolution, can be used as a framework for thinking about digital narrative experiences and can benefit the development of narrative in games.

My research aims to explore this perspective and articulate the similarities between these two experiences. The question I ask is: what are the characteristics of early narrative print experience that help create children’s perception of narrative and that are shared with digital game experience? The answer lies in examining the narrative experience of young children, identifying its characteristics, and determining which of these characteristics relate to digital games and how they relate to them.

By exploring the similarities between these two media and establishing the relationship between them, we inform the process of narrative's evolution in digital narrative games and provide for its use the breadth and depth print narrative has developed over the centuries.

In this introductory chapter I first explain briefly the importance of narrative in children's lives and then show how game narratives do not fulfill their potential in the narratives they currently provide. I then describe how my research has evolved from an emphasis on technology to an emphasis on experience, a result of observations of children using games both in structured study situations and in home environments. Next, I address the cross-disciplinary nature of my research and identify research and publications from the different disciplines that I have used extensively in this study. I then explain the language used in the study in order to provide a common ground of understanding between disciplines. Finally, I conclude with an overview of the focus of each chapter and the issues addressed to bring us to our theory.

1.1. The Problem: Championing Meaningful Narrative in Games

Narratives are important to us as human beings. They are a fundamental way in which we make sense of the world around us. Children hear stories from a very young age and these stories
help them shape their experience and put what happens to them on a daily basis in context of the wider world around them. They are a means of enculturation.\textsuperscript{10} Stories are central to children’s cognitive development and to their affective growth.\textsuperscript{11}

Originally narratives or stories (these terms are used interchangeably here) were shared orally. From the time moveable type could mass-produce text in the mid fifteenth century, print text evolved to be an important, and eventually a primary means of communication, and a way in which culture and knowledge were shared.\textsuperscript{12} From the eighteenth century on, print narrative expressly directed at children took on an increasingly important role in their understanding of the world. Schools, in particular, as they evolved in the nineteenth and twentieth century, adopted books as a means to educate.\textsuperscript{13} Although radio, film, TV, and video were introduced as new communication media, throughout the twentieth century, print maintained its importance as a vehicle through which children in western societies acquired knowledge of their world in both home and school settings.

Children’s books give children images to think with.\textsuperscript{14} They continue to be socially and educationally influential and “important both politically and commercially” through their contributions to our culture.\textsuperscript{15} In 1987, the eminent children’s book editor Jean Karl described the role children’s literature plays in our society when she wrote, “children’s books carry the best of past and present understandings into the future.”\textsuperscript{16}

In his treatise \textit{Books Children and Men}, originally published in France in 1934, Paul Hazard expresses what children themselves have felt about books, “‘Give us books,’ say the


\textsuperscript{16} Jean Karl, a children’s book editor for over fifty years, believed strongly that adults have a responsibility to provide children with true literature, full of depth and encompassing the truths of generations. Of the books she edited, five won Newbery Medals, six were Newbery Honors books, two received Caldecott Medals, and one was a National Book Award winner. She was also the editor of the \textit{Earthsea} trilogy written by Ursula LeGuin. Karl. “What Sells = What’s Good?”
children; ‘give us wings.’ Hazard’s understanding of what makes books good books for children is expressed eloquently by the publisher of The Horn Book, Bertha Mahoney, in the 1966 reprinting of his book:

What he asks for in children’s books... Books faithful to the very essence of art in offering an intuitive and direct way of knowledge bringing to children liberation, joy and happiness. Books that share great emotions with children, building respect for universal life and for the mysterious in creation and in man. Books that respect the valor and dignity of play. Honest books of knowledge which plant in a child’s soul a seed to develop from the inside. And finally, books that contain a profound morality, that set in action truths worthy of lasting forever and of inspiring one’s whole inner life, that maintain in their own behalf faith in truth and justice.

Today, in 2007, children’s books maintain their value as a means of bringing not only stories of their world, but also the world’s stories to children. However, as statistics show (and as every parent with a computer or game console knows), digital media have become a significant part of our culture, and computers and video game consoles are a fact of life for children.

Children between the ages of 6 and 17 are among the heaviest users of games, with 42% of them playing at least an hour each day. Games have not replaced activities such as reading or being read to, listening to music, and watching TV or videos for younger children such as toddlers and preschoolers. But they are increasingly being used for entertainment and for education, especially as new systems are designed for younger and younger children. Marketing promotions for many games claim they provide an engaging story within which to play. And they do. But the range of narrative offered is meager in its presentation of story schema and severely limited in its breadth of world experiences and values. Though sales in children’s books indicated that reading has held steady, as children have more options for how to spend their time, and as the age at which children are introduced to digital environments becomes younger, it becomes increasingly important to reach them with a breadth of good stories through media they find so very engaging.

---

19 Though television is now digital, the term digital media is used here to refer to computer and video game technology.
21 In the U.S. in 2005, 162.2 million children’s books were sold. Adult books sales were 480.7 million. The top selling book of all categories was the children’s book by J.K. Rowling, Harry Potter and the Half Blood Prince, with 7.02 million sales. Even with the success of Rowling’s books over the past few years affecting sales statistics, the sale of children’s books has been holding steady over the past number of years. See “2005 Numbers Crunched: A Strong Book Year – Better-Performing Releases Than in ’04” (January 09, 2006) in The Book Standard at http://www.thebookstandard.com.
22 Appendix F provides a list of children’s book awards that can be accessed via the internet.
Writing in 1997, Janet Murray offered a promising view of the evolution of narrative expression in new media.

...our children are already at home with the joystick, mouse, and keyboard. They take the powerful sensory presence and participatory formats of digital media for granted.... This book is an attempt to imagine a future digital medium, shaped by the hacker's spirit and the enduring power of imagination and worthy of the rapture our children are bringing to it. 23

Murray envisioned a storyteller who is half hacker, half bard; one who tells stories in a medium that “promise[s] to reshape the spectrum of narrative expression, not by replacing the novel or the movie but by continuing their timeless bardic work within another framework.” In doing so, she provided us with an idealistic vision of the digital narrative experience of the future, seeing “glimmers of a medium that is capacious and broadly expressive, a medium capable of capturing both the hairbreadth movements of individual consciousness and the colossal crosscurrents of global society.” Like Murray, I believe digital media have the potential to be a significant means through which to deliver narratives that reflect society’s best values and understandings to children.

Computer technology has accommodated print narrative since Michael Hart began digitizing the world’s English print literature for his visionary Project Gutenberg24 in 1971 and Will Crowther wrote the first text adventure game, Colossal Cave Adventure, in 1972. 25 The plain vanilla text narratives of Project Gutenberg evolved into hypertext such as Deanna Larsen’s work of poetic fiction, Marble Springs. This was quickly followed by hypermedia such as C.D. Coverley’s CDROM novel Califia, that includes text, sound, and graphics. On a parallel track, the computer text of Will Crowther’s Colossal Cave Adventure evolved into the text, graphics, and animation of video games, such as Myst and Final Fantasy.

Throughout the 1980s game developers used a range of stories for their games as they explored new territory. After the game industry crash of the mid-1980s, they became more cautious in their experimentation. After the enormous success of the first-person shooter game Doom (1993), the variety of games being developed decreased significantly as first-person shooter games became “the de facto standard for game publishers” because of their financial

24 Founded in 1971 by Michael Hart, Project Gutenberg was conceived as a “project of free access to content.” It currently houses 18,000 books online which are available for downloading free of charge (2 million ebooks downloaded each month). For a history of the project and to access the catalogue go to http://www.gutenberg.org/.
25 Narrative has been a part of the digital world since Ted Nelson conceived of hypertext as a “text-handling system which would allow writers to revise, compare and undo their work easily” for a course at Harvard University in 1963.
success. The promising and budding children's narrative publishing industry that had its start in the late 1980s, and which by the early 1990s was giving us successful interactive stories on CDROM such as Mercer Mayer’s *Just Grandma and Me* (Broderbund), gave way before the exponential growth and subsequent domination by the video game market. In the children’s digital narrative field, games came to predominate over other narrative genres. With 7 billion in sales in 2006, the video game market continues to grow.

As mentioned, the majority of narrative games fall into first-person shooter or adventure-quest themes that have proved to be financially successful for game producers. These are the games that children and their parents will find on the shelves of retail stores such as *EBGames, Future Shop, and Walmart*. Studies by the *Kaiser Family Foundation* and *The National Institute on Media* (among others) have found that the majority of the games available for purchase at these major retailers are violent and gender, or racially biased, and present negative stereotyping and questionable life values. In 2001, 89% of the “top-selling video games contained violence, with half the games containing serious violence, and 17% featuring violence as the primary focus of the game.” Males dominated as player-controlled characters (73%), and even non-humans (15%) outnumbered female characters (12%). All the human characters in the seven top-selling games intended for children were white, while 87% of all the heroes were white. In 2002 *Zany Brainy* stopped selling video games, and its parent company FAO stated they wouldn’t “carry any of the games with violence, and it seemed to us that those are the most popular games and the games that the industry was focusing on* (author italics).

When looking at digital narrative today, particularly at the narrative game market, Murray’s vision of the continuation of “timeless bardic work” that has the potential to present Karl’s “best understandings” to our world, is barely perceptible. In *The pleasures of immersion and engagement: schemata, scripts and the fifth business*, J. Yellowlees Douglas and Andrew Hargadon provide us with one reason why there is limited diversity in game narratives. They suggest writing narrative for games is driven by the perceived need that only action keeps the user engaged; the resulting narrative is limited and contained by the action. This is seen in the many digital games such as *SuperMario64*, that base their action on the successful schema of arcade

---

28 Key Facts: Children and Video Games. p. 4.
29 *Zany Brainy* is a children’s toy store with 170 outlets throughout the US that offers a select variety of quality toys and books.
games which offers a strong immersive experience through first-person action (escaping through mazes or pummeling a protagonist). Adventure games such as *The Hobbit*, which have stronger text narratives, evolved from Crowther’s *Cave Adventure*, and use a “treasure-hunt-cum-grail quest” schema. This schema successfully integrates Crowther’s narrative approach with arcade action. Early success with these schema dominated the evolution of games. As Douglas and Hargadon point out, “early game developers hit digital pay dirt by founding their first ventures on the bedrock of two essentials: a recipe for interaction that all but guaranteed a deeply immersive experience and strong, normative schemata borrowed from already-familiar forms of entertainment.”

These two schemata, first-person shooter and hunt-quest, were the formula new users and future developers were raised on, and they became self-perpetuating. Designing games based on new schemata is difficult, as people do not always respond positively to new schema that place extra demands on memory and comprehension, and there is no assured acceptance by audiences that guarantees financial return.

Within the children’s video game genre there do exist different types of narrative: stories for children in early elementary school such as Marc Brown’s *Arthur’s Teacher Trouble* have been used for educational games (Living Books), plying subjects such as literacy, math, science, and writing; stories written for film such as Dreamwork’s *Shrek* have been translated into the game genre (Activision Publishing); and well-considered stories for older children such as J. K. Rowling’s *Harry Potter and the Philosopher’s Stone* (first made into a movie) have been used as a base for games (EA Games). A small selection of games that have diverse narratives is also available for purchase from internet sources. There are a number of small companies, such as Tivola, whose philosophy is to develop good narrative along with good games. Tivola has developed games from traditional stories such as *Robinson Crusoe* and *The Little Prince*, and from new stories such as *Max and the Magician*. These offer some diversity in story, but not in how children interact with the story, that is, in gameplay.

More recently, the Nintendo company has been creative in offering simulation games such as *Animal Crossing*. This game provides children with an opportunity to explore narrative in new ways by introducing a schema that is best represented by the adult game *The Sims*. Similar in

---

34 Along with traditional titles such as *Robinson Crusoe* and *The Little Prince*, Tivola has developed a series of quality stories for various age groups. See [http://viva-media.com/classicTitles.html](http://viva-media.com/classicTitles.html).
nature, *Animal Crossing* provides a virtual village that children can build and in which they can go about a daily routine. They also have the opportunity to affect each other’s environments by visiting and making changes in the other’s space. *Animal Crossing* actually offers two new schemata to children as it is both a life simulation and a communication game. The earlier game *Harvest Moon* also allowed children to build an environment but in a more limited way. In its most recent iteration, the simulation game *Nintendogs* let’s children build a dog’s life on the handheld Nintendo DS. These are non-combatative and non-quest oriented games that add to the range of schemata available in the video game genre.

Most game developers, however, in their pursuit of financial success, have stuck to the original two familiar schemata and produced popular narrative games such as *Shrek* using an arcade action interface with the story. As a result the development of games over the past ten years has, for the most part, seen an improvement only in real-time graphics. This is a significant improvement in technology, but has not required any exploration of new concepts in merging narrative with gameplay. In their defense, as storytellers, game developers simply do not have sufficient information about characteristics of the narrative experience that engage children to move forward with confidence into the uncharted territory of new and different schemata.

In addition to the game developer, an important player central to the state of children’s digital narrative is the children’s author. It is the children’s author who writes stories that reflect society for children in language familiar to them. Though authors are comfortable with digital technologies, as is evidenced by the many delightful websites they use to connect with their audiences, they do not use this technology to present their work in interactive, hypertextual terms. Those who have taken the opportunity to write for digital environments, do so within the narrow confines of the traditional book form on screen, such as the stories presented in the story site *Fablevision*. A rare exception is Mercer Mayer (*Little Critter*) whose interest in both storytelling and computer technologies brought us the earliest interactive stories on CDROM in the early 1990s.

---

35 Nintendo’s new Wii is a notable exception. This system takes advantage of characteristics shared by early narrative experience and game experience, such as physical play within an environment created by the player.
38 See at http://www.fablevision.com
It takes time away from their writing for authors to learn how to use an interactive technology, and again to learn how story can be presented within an interactive structure. Authors are interested in telling stories; at this point it seems there are few of them interested in learning the intricacies of interactive technologies to tell these stories in what they see as technologically challenging ways. From a story experience perspective, authors do not have sufficient information about why children engage successfully with interactive narratives such as video games to have sufficient direction and confidence, or indeed interest, to write stories for new media environments.

This brings us to another impediment to developing a breadth of narratives, one that has influenced both authors and developers: the argument that games, because of their interactive nature, cannot support what has been called "traditional narrative structure." Fueled throughout the 1990s by the increasing academic evolution of ludology as a theoretical study, this argument has evolved over twenty years. Today, the potential for different narrative approaches is acknowledged and even defended by senior media scholars such as Henry Jenkins. However, the theory that the traditional narrative arc and sequential climactic plot are the norm for narrative that has been maintained throughout this argument, and been strengthened by repetition, continues to work against print authors' entering the game field, and against game developers' using the broad range of narrative available in print. In this thesis, I suggest that a more comprehensive view of the broad and diverse nature of narrative's structure, as it has evolved over the centuries, acknowledges existing print narratives as possessing a legitimate structure for games. It also acknowledges the types of narrative structure visible in game environments as legitimate. If there are few good hypermedia stories for children written by children's authors, and children continue to be exposed to digital books, games, and simulations of limited quality, their wealth of narrative experience at this point can only come from other media – print, film, and television.

Research direction

If a breadth of narrative is an important aspect of digital environments, as I believe it is, and we want to influence authors and developers to explore and create new storytelling genres, then we need to provide them with tools that will allow them to do so.

39 Part of the work undertaken during the first stages of my research in 2000 was a comprehensive survey of the digital literature available to children. This included surveying opinions from authors, publishers, and librarians about the future of eliterature. To gain insight into children's authors' ideas about using new media I familiarized myself with a selection of popular children's authors, read most of their children's works (and other writing that was available), and researched their internet sites. I provided questionnaires and conducted personal interviews with five of these authors. See Madej, Krystina. Children's Digital Literature Today: A Survey. Kennesaw, Georgia: Kennesaw State University, 2001.
The preliminary research I had undertaken to address this issue focused on technology: on the interaction between children and computers and game consoles, and on the tools children used to interface with software programs and with games. This initial direction changed as a result of two things: a study that involved observing three different groups of children in summer computer camps and a home observation of my own children and their friends. During the summer camp study, I observed children respond to instructions from camp leaders, to discussions with their peers, to the graphics content of the course, and to the course technology. I noted that, in all three groups, children’s social relationships with the instructor, and in particular their peers, together with the graphics content of the course (i.e. the examples the instructor provided), had more effect on what they created and discussed than did the technology or interface they were using. This conclusion offered me a new direction for exploration, as it led away from a narrow focus on technology and towards a more holistic consideration of the experience of game play within a cultural environment.

The home observation also encouraged this approach. During observation I found that although children enthusiastically embrace the newest game platforms, they are equally enthusiastic about playing older-style games on soon-to-be or already-are obsolete systems. In particular, they enjoy playing handhelds which, even with limited graphics and movement options, allow character development and story action and which, possibly equally importantly, can be used comfortably in almost any environment. Children control story action and characters equally fluently in any system they are using, adapting easily to whatever options are available. They take the opportunity to discuss their characters’ attributes and game developments with their parents, siblings, and friends as they play or at gatherings like mealtimes.

I found a similarity between children’s approach to characters and story in these situations and what I had observed in children’s engagement with print stories. In both media, the narrative encounter is more than just the technology (or medium) and more than the interface with technology, whether text and pictures in a book, or text and graphics in a game. It is a holistic activity during which children make characters and events their own through cognitive, physical, and social activities.

Children bring a perception of narrative with them when they come to play a narrative game. This perception is built up within a social environment through a variety of auditory, visual, and physically interactive experiences with print narrative from a very young age, often

---

40 See Chapter Two for more information on these studies.
from birth. It constitutes their narrative understanding and the gestalt they bring with them to playing narrative games. For the most part, our appreciation of how young children in preschool and kindergarten perceive narrative is based in our adult experience and perception. It has been shaped by our assumption of a narrative structural norm: the traditional narrative arc. But children’s perception of narrative is formed before they are introduced to the formal concept of traditional narrative structure in elementary school. It is only in their primary years that they are encouraged to become efficient “silent readers,” to recognize traditional narrative texts and structures, and to become proficient in using these in reading and writing. My observations led me to think that this traditional structural norm is superimposed on an earlier perception of narrative that may have more relevance to children’s experience with games and one well worth exploring.

1.2. Theoretical Footings

The goal of this dissertation is to identify the characteristics of early print narrative experience and show how they relate to characteristics of digital narrative game play. In order to consider and assess characteristics of these experiences a common perspective needs to be established across the interdisciplinary fields that is encompassed by the research. These disciplines include: narrative theory, children’s narrative, new media, and children’s cognitive development. An interdisciplinary approach makes for new perspectives, as theory is translated from discipline to discipline and adapts to its new home. For instance, narrative theory draws primarily on adult experience and needs to be considered from a different point of view when applied to children’s experience.

This section highlights the scholars, research, and publications from these disciplines that have been particularly influential in setting direction for my explorations.

Narrative

The most influential and persuasive arguments for a view of narrative that encompasses more than the “traditional narrative structure” are made by Walter Ong. In *Orality and Literacy* Ong suggests the narrative arc with its climactic plot has played only a brief and limited role in the history of narrative since Homer’s time. Margaret Anne Doody adds weight to this argument through her history of the novel since classical time. She provides extensive information on different narrative approaches such as the epic and the romance which were used

---

41 Ong, *Orality and Literacy*. 

12
for centuries – clearly for longer than the climactic plot has existed. 42 James J. O’Donnell 43 and Elizabeth Eisenstein 44 discuss the influence of print on cultural and political spheres and identify changes within society that happened because of the use of print as a communication tool, changes that ultimately affected how adults perceived children.

Three scholars in particular have provided the history and theory related to children’s enculturation in western society through print narratives. Cornelia Meigs, and her co-authors, provide the most extensive history and critical evaluation of the development of children’s literature. She begins her survey as far back as the ancient Celtic folklore oral traditions, and completes it in the mid-1970s. 45 Meigs writes from the point of view of “experience of delight” that children take in exploring literature, a perspective that stresses the pleasure children take in reading stories, no matter what era. This historical analysis is the American counterpart to Harvey Darton’s Children’s Books in England: Five Centuries of Social Life published in 1932. Darton provides insight into a social environment that saw children’s books as “always the scene of a battle between instruction and amusement, between restraint and freedom, between hesitant morality and spontaneous happiness.” 46 These dichotomies are evident in the contradictory attitudes towards newer communication media as well, and, of special interest here, to the digital games of today. Though both Meigs and Darton discuss the influence of society on the direction of books, it is Mary Jackson who, in her discussion of children’s books from 1744 to 1839, presents the most detailed and strongest arguments that the direction of changes in children’s narrative was influenced by changes in society. She shows through examples that many books were the result of adult’s intent to mold children’s behaviour “to needs and specifications determined by a prevailing social standard.” 47 When we see that children’s literature has mainly been written by adults for a purpose, whether it be providing moral instruction or teaching literacy, we can understand the importance children’s books took on in society for creating meaning and structuring worldview.

It is particularly useful to be aware of literacy practices throughout the centuries as children’s print text and literacy are inextricably linked: in order to access text we need to be able to read. The first children’s books were written to teach them their ABC’s. In Opening the Nursery Door editors Mary Hilton, Morag Styles, and Victor Watson present a series of essays on

---

43 O’Donnell. Avatars of the Word.
44 Eisenstein. The Printing Press as an Agent of Change.
47 Jackson. Engines of Instruction, Mischief, and Magic. p. xi.
the teaching of literacy from 1600 to 1900 that breaks ground in documenting unexpectedly progressive approaches used by parents and educators in teaching literacy to their children. In particular Shirley Brice Heath’s essay concerning Jane Johnson’s (1706-1759) use of ephemera, such as card sets to teach her children literacy, shows that the strategies of three hundred years ago for teaching literacy are similar to those used today.48

Children’s literature scholar Peter Hunt moves children’s print narrative to the edge of new media for us. He writes, “From a historical point of view, children’s books are a valuable contribution to social, literary, and bibliographical history; from a contemporary point of view, they are vital to literacy and culture and are at the leading edge of the trend towards image-and-word, rather than simply word.” Other authors discuss the importance of children’s literature in society but Hunt also positions children’s books outside the typical printed text and considers them as “probably the most interesting and experimental of texts,” because they use “mixed-media techniques which combine word, image, shape, and sounds.” He provokes thinking about the connections between children’s books and digital narratives, particularly so when he suggests that the “more-than-linear,” multimedia, and interactive, characteristics of children’s books “bring us close to the book as game.”49

New media

Theory in new media that looks at the nature of narrative in digital games is based in adult narrative.50 Jay Bolter, Janet Murray, and Espen Aarseth were some of the first scholars in digital narrative. Their writings were instrumental in establishing the parameters of the field and providing much of our understanding of the adult experience. Author/scholar Marjorie Luesebrink provides us with one of the first practical examples of a novel written in a digital environment that takes advantage of the multimodal aspects of the medium (text, animation, music). The work of these scholars provides a range of perspectives from which to examine young children’s narrative and I present them here to show how I use adult new media theory to interpret children’s early narrative experience.

Jay Bolter theorizes that the computer is a refashioned writing space and hypertext is a remediation of print and an evolving way to write.51 As his writings progress, he eventually incorporates all media previous to digital, including art, architecture, photography, and film in the
remediation process.52 Young children’s books are an excellent example of remediation. Throughout the centuries they have changed their appearance to interpret old stories in new ways, and have progressively incorporated visuals, sound, and manipulable.

A discussion which is even more important to our question about the connection between print and games is one concerning immediacy and transparency. Bolter and Richard Grusin tell us that new technology becomes a familiar tool for us in only a short period of time.53 Referencing Errki Huhtamo’s media theories, they point out that because our society assimilates new media quickly, internalizing and making the procedure of its use second nature, immediacy, the aspect of the media which makes the interface invisible or transparent to the reader/player, is not necessary to make the experience feel authentic.54 Authored works such as Luesebrink’s Califia use hypermediacy to the narrative’s advantage, overlapping multiple linking windows in an obvious way to present story rather than concerning themselves with minimizing or hiding the interface process.55 The ease with which we assimilate hypermediated environments has its beginnings in early narrative experience. As young children we encounter and learn to interpret different combinations of text and illustration and interact with a wide range of narrative artifacts to access the text and visual messages they contain. A hypermediated environment is an extension of this experience of story. It is not a new schema for children.

Janet Murray presents provocative ideas about how the computer will shape the ways in which stories are told in the future. Through her analysis of digital environments, she distills a set of intrinsic properties that she believes digital narratives possess: procedural, participatory, spatial, and encyclopedic, and a set of pleasures: immersion, agency, and transformation.56 Two of these properties are applicable to our particular discussion of young children’s narrative experience, participatory and spatial, and all of the pleasures. Murray uses the term participatory to mean interactivity and an active engagement on the part of the user. She provides examples of these two properties, from the early set responses of the ELIZA program, to the emergent virtual reality of a futuristic Holodeck.57

52 Bolter. Remediation: Understanding New Media.
53 To explain further: Immediacy is making an alternate reality seem present and real and without a media interface, hypermediacy is when the media is seen as part of the reality. Immediacy is said to be transparent and hypermediacy is said to be opaque. Remediation is the process whereby an audience becomes aware of the medium but this awareness no longer affects the experience of the reality.
54 Bolter. Remediation: Understanding New Media.
55 A sample reading of Califia can be found at http://california.us/. The CDROM hypertext novel was written by Marjorie Luesebrink between 1995 and 2000. It was written under the name M.D. Coverly and was published in 2000. It is available from Eastgate Publishers.http://www.eastgate.com/catalog/Califia.html
56 Murray. Hamlet on the Holodeck.
57 The Holodeck is a virtual narrative engine (fictitious) first introduced in the television program Startrek. Participants enter a space in which they can create a virtual story world.
Murray points out that the spatial nature of the computer is more than its ability to display three-dimensional objects – it offers users opportunities to navigate within the space of the narrative. The spatial nature of new media is also noted by the media theorists Henry Jenkins, Eric Zimmerman, and Lev Manovich. Manovich says, "Movement through space allows the player to progress through the narrative"; it is "a way to explore the environment." Spatiality is also a factor in children’s narrative experience, in two ways. First, narrative artifacts such as manipulable books are themselves spatial. Second, children create representational spaces through which they navigate in their personal and social performance of stories.

An important perspective that links children’s narrative to games is one set out by Espen Aarseth in *Cybertext*. Aarseth presents game narrative, or cybertext, as a continuation of an existing "ergodic" literature: literature that is open and dynamic and which requires the reader to work to access both the text and the story it tells. He provides as examples the calligrammes written by the poet Guillaume Apollinaire. These poems consist of words that spread out on a page to create a picture and do not have a specific point from which to start. Most adult text narrative, whether poetry or prose, is not ergodic. On the other hand, young children’s narrative texts range from shaped poems in shaped books, to movable books in which children can pick and choose parts to explore and stories to construct. These require “non-trivial effort.” Children’s earliest experience with stories is often ergodic.

**Children’s cognitive development**

Children’s perception of story evolves as part of their cognitive development; they learn about story as they learn to think. The stages of learning developed by psychologists Jean Piaget and Jerome Bruner accommodate the process of becoming familiar with story that children undergo. At ages two to seven (approximately Piaget’s sensorimotor stage and Bruner’s iconic stage) children begin to recognize image and language and use these to become familiar with their world. This is the age group in which narrative perception is formed.59

In researching children’s narrative perception I use a constructivist viewpoint based on Piaget’s theory that our understanding is constructed through interaction with our surrounding environment. To this I add social interaction as an important aspect of children’s narrative experience. This addition is supported by Bruner’s theory that culture and society are

---

59 A paper on how these theories applied to my research was first presented at *The Game Design and Technology Workshop and Conference* in Liverpool, November 2005. See Madej. "Children and Multiple Early Narrative Experiences: A Segue to Digital Narrative Gameplay."
fundamental to children's development and by Lev Vygotsky's theories that learning and development cannot occur without it.\(^{60}\)

Also of importance is play. For children play and reality are one and the same. Play operationalizes learning: children integrate artifacts and events into their lives through their explorations in social play. Melanie Klein's studies of children's play explore the process of symbolization,\(^{61}\) while D. W. Winnicott's subsequent research focuses on childhood play as a fundamental experience.\(^{62}\) Changes in the approach to children's education throughout the seventeenth and eighteenth century took the literature published for them from didacticism to playful entertainment. There is a pendulum swing between the two approaches throughout the history of children's education and the literature that supports it. While Klein and Winnicott developed their play theory working with children with disorders, more recently play has been given attention by educational psychologists. Dorothy Singer, Roberta Golinkoff, and Kathy Hirsh-Pasek in their book *Play = Learning* provide a range of studies that demonstrate how free play enhances learning and development and has beneficial long-term effects.\(^{63}\)

### 1.3. Common Terms

Narrative and game terminology is interpreted in different ways depending on the discipline being studied. At this point it is useful to explain how I use terms in order to provide a common ground for the subsequent discussions.

#### Narrative terms

Narrative is used here at its most familiar to a general reading public – as story. I use narrative and story interchangeably.\(^{64}\) If a story is used as a framework to provide information, as is very often the case with children's writings, then the work is called a story. Works that provide information only are not stories. English language authority Arthur Applebee provides a way that we can understand this differentiation. He separates the language of narrative into transactional

---


\(^{64}\) A number of scholars view narrative and story as two separate entities, or view story as a literary subset of narrative. In *The Stories Children Tell* Susan Engel suggests that while both story and narrative are accounts of experiences that "are temporally sequenced and convey some meaning," story is communicated intentionally while narrative can be part of a conversation which isn't necessarily "experienced as a story by the speakers." Susan Engel, *The Stories Children Tell* (New York: W.H. Freeman and Company, 1995). p. 19.
and poetic. In transactional writing he includes historical, philosophical, and scientific topics. This is informational writing. This writing is objective; it requires a “participant” who interacts with the information in a transactional inquisitive manner. Poetic writing is expressed subjective experience. This is literary writing or story. Reading it requires a “spectator” to create relationships between the elements of the work and view it as a whole.65

Not to be confused with Applebee’s poetic writing, the poetics of narrative are the rules and conventions which shape narrative. The study of poetics divides the subject of narrative in two: story and plot. Story consists of events, characters, and settings which make up the whole message. Plot is the technique of sequenced presentation of the narrative events. Literary theorist Seymour Chatman distinguishes these components as story and discourse and suggests that story does not depend on any particular medium but is transposable.66 This is the most important of these distinctions for us. The concept of transposability supports our future discussion of children’s use of stories they are familiar for subsequent play activities.

An additional distinction that is important to our argument is that narrative has a reader who interfaces with the story and completes the story experience. Stories are dialogues with the author. The audience – reader, listener, viewer – is an active and critical part of this dialogue. The literary theorist Mikhail Bakhtin considers this dialogism to include the past history of the words and the stories, and the cultural experiences of the author and the reader. “Utterances,” as Bakhtin coins words, phrases, and texts used by us, are heteroglossic: they are affected by the pushes and pulls of everyday life and their meanings change continuously in minute ways. This fluidity is in contrast to more structured approaches to the study of language and literature. It provides room for the vital nature of children’s narrative experience.67

---

67 Bakhtin, a Russian thinker and literary critic, began his writing in the 1920s. In exile in Kazakhstan throughout the thirties because of the revolutionary nature of his work, his writings did not reach the west until after the republication of his 1929 work, *Problems of Dostoevskii's Work*, during the more open era of the 60s. His writing was first translated into French in 1970 and since that time he has emerged as a leading thinker of the twentieth century. Bakhtin felt that the human utterance was a product of the interaction of langue (abstract grammatical form) and the context of the utterance. The most important feature of that utterance was its dialogism. "An utterance requires both a speaker and a listener, who... have joint proprietorship of it." Morson, Gary Saul, and Caryl Emerson. *Mikhail Bakhtin: Creation of a Prosaics.* Stanford, California: Stanford University Press, 1990. p. 131. Bakhtin believed that this dialogue was continuously changing. He says, "The living utterance, having taken meaning and shape at a particular historical moment in a socially specific environment, cannot fail to brush up against thousands of living dialogic threads, woven by social-ideological consciousness around the given object or utterance, it cannot fail to become an active participant in social dialogue." Bakhtin, Mikhail Mikhailovich. "Discourse in the Novel." Trans. Caryl Emerson and Michael Holquist. *The Dialogic Imagination: Four Essays.* Ed. Michael Holquist. Austin: University of Texas Press, 1981. p. 276. Heteroglossia continually translates the alterations and reevaluation of everyday life into new meanings and tones. These, altogether and over time, always threaten the wholeness of any language. The wholeness of any language is never "given, but is always in essence posited." Morson. Mikhail Bakhtin: Creation of a Prosaics. p. 30.
Story structure: traditional print stories

Western society's current view of traditional narrative structure is that it has a beginning, middle, and end consisting of the narrative arc of introduction, climax, and denouement. The story is a presentation of a sequence of causal events that happen over time, is populated by characters, set in a place, and can be either a true or a fictional account. An example of such a story is Robert Louis Stevenson's *Treasure Island*.\(^6\) This begins with an introduction to Jim Hawkins, Long John Silver, and the pirate Flint’s treasure map, takes us into the excitement of the pirate mutiny and the fight on the island, and ends with finding the treasure and sailing back to England. This structure is used in many stories written both for younger and older children, such as the classics *The Tale of Peter Rabbit* (Beatrix Potter) and *The Secret Garden* (F.H. Burnett).

Story structure: picture books, movables, interactive books

Picture books for young children are a genre of story in which pictures are an integral part of the story. Visuals change the sequence in which children enjoy a traditional story. They often will not start a book at the beginning but will open it to pages that depict favorite moments, such as the monster pages of Maurice Sendak’s *Where the Wild Things Are*. In addition to pictures, movables and sound have been added to text to enhance or tell the story. (Chapter Four provides more information on movables.) An exciting direction for movable books is the increased interactivity exhibited by Janet and Allan Ahlberg’s *The Jolly Postman*. This book includes envelopes that contain letters, postcards, and games that a child can remove and play with, and encourages excursions outside the sequence of events that exists in the text. The story does not have a climactic plot, as each event is given equal importance within the story framework. Children can give any one of the events more importance by taking more time to engage with the event. Though they may not have moved through the story sequentially, or even engaged with all of the events, children have experienced a story.

Story structure: narrative games

Game narratives do not follow the traditional narrative arc, although they are occasionally based on traditional print narratives. Rather than giving importance to introduction, climax, and denouement, game narratives emphasize action which the player controls. Action is linked causally – a player’s actions move him to the next event – but events are not necessarily encountered in a sequenced manner. An example is the *Harry Potter* stories. In the game version

---

\(^{6}\) Originally written for adults, this story was quickly taken up by children and made into their own.
of *Harry Potter and the Chamber of Secrets*, the "beginning" is an abbreviated introduction from the movie version of the print story that moves quickly into an action sequence – getting past the Whomping Willow. This short beginning can only set the scene if the reader is already familiar with the story. The purpose of the story in this game is to provide a background for player activity. Players repeat actions to master them and only when the task is mastered does the player move forward in the story. The scenes from the story which most readily incorporate action-oriented interactivity are used in the game. Because there are many action sequences to master, children may never reach the end of the story. Alternatively they may reach the end of the story without encountering all of the information embedded in the game. The game story does not conform to contemporary notions of traditional narrative structure, but it is a story nonetheless.

**Digital narrative terms**

*Digital narrative* refers to any story told in a computer, game console, or handheld environment. I mean this term to include digital versions of print narratives, hypertext, and hypermedia, as well as computer and video game narratives.

Traditional print literature for children such as *Aesop’s Fables* \(^{69}\) is available as text on websites such as the *AesopFables.com*. More elaborate hypertexts, such as Deena Larson’s *Disappearing Rain*, which consist of layers or levels of text which the reader can access through links, have been developed predominantly within adult literature. \(^{70}\) The same is true of hypermedia such as Luesebrink’s *Califia*. This novel includes not only text but also images, sound, and animation that a reader can access through links. Children’s *elit*iterature is predominantly in the nature of traditional text and illustration. (Chapter Six provides more information on digital narrative.)

*Animated narratives* are that class of digital narrative which gives children opportunities to make incidental things happen in a picture but which do not direct or affect the story in any way. Mercer Mayer’s *Just Grandma and Me*, for instance, has clickable images that reveal a short animation when activated. In the scene in which Grandma is sitting on the beach under an umbrella, the umbrella flies away when it is clicked on. Historically, animated narratives have only been produced for children. They are available on CDROM and on the WWW.

*Digital game* refers inclusively to any game intended for play on a computer, a game console, or a handheld game device. In their book *Rules of Play*, Katie Salen and Eric

\(^{69}\) Available at http://www.gutenberg.org/files/996/996.txt  
\(^{70}\) http://www.deenalarson.net/#mine
Zimmerman discuss and compare eight definitions of game and provide their own whittled down version, "A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome." They go on to say that games are a complex phenomena and suggest that at times this definition can become fuzzy, particularly when a software program skirts its borders. Their discussion concludes with the comment, "Sometimes the answer to the question of whether or not a game is a game rests in the eye of the beholder," and provide examples of how two possibly contentious game-like phenomena, puzzles and role-playing, actually fit into their definition. 

Children's games, which often include animated stories, sing-alongs, puzzles (Winnie the Pooh), and role-playing (Oregon Trail), sit on the fuzzy edge of any strict definition.

Early in the history of games, Chris Crawford provided two broad classifications for games, Skill and Action Games and Strategy Games. Games are now more widely viewed as either ludic or narrative in nature; these reflect Crawford's original classifications. Among other differences, these classifications provide for different player objectives. Ludic games often emphasize arcade-style action and involve winning or achieving specific goals. Narrative games, although they may also consist of action-oriented activity, place equal or more importance on story strategy. They may also include winning or achieving a goal as a story end. Games are not necessarily one or the other (although they can be) but are often on a sliding scale between the two. Games such as the classic arcade-action game PacMan are ludic, with no narrative associated with action. Games such as SuperMario 64 move along the scale. Mario has a quest; he must find Princess Peach. However, it is his actions that are of primary interest to players, and this makes the game more ludic than a game like Harry Potter and the Philosopher's Stone. Harry Potter's actions move him to new narrative scenes as he works toward his goal. Further along this narrative continuum is Zelda in which players can change their characters and affect the story to accomplish their goals. We finally come to games like Animal Crossing in which building a story environment is the primary goal. A range of more adult-oriented games would include Doom, which has a simple storyline but is mostly action-oriented, as most ludic, Half-Life, which has quite a complex story and a lot of action, in the mid-range, and The Sims, with its environment and character building scenarios, as most narrative.

---

Narrative games such as Animal Crossing consist of activity that is a simulation of real-life. These games fall into an additional classification that has significance: they are emergent games. In emergent games events change in response to the actions of the player and make the narrative unique to a player, as in an improvisational drama. With emergence, children's exploration of "possible relationships among game elements is continually engaging" because of its "variety, novelty, and surprise." Most games are embedded, they have authored storylines and actions that are a framework within which a player moves.

Games are available for both PC and Mac platforms. Game consoles include systems such as Nintendo's Wii, Sony's PlayStation3, and Microsoft's XBox 360. Current popular handheld devices are the Game Boy DS and the PlayStation Portable (PSP). Additional devices such as the DK Kongas for GameCube (conga drums), the EyeToy for Playstation2, and the Dance Mat (Intec) for all systems, extend physical interactivity for console games. Educational learning systems such as LeapPad and VSmile are available for younger children both as home consoles and as handhelds. Initially, internet connections made online games accessible to players who used computers. Conscious of the increased interest in online games, game publishers have developed the next generation of consoles with networking capabilities.

1.4. Chapter Overview

This dissertation aims to link young children's print narrative experience to digital game narrative experience. As this is the first significant attempt to do so, it is necessary to build an infrastructure of information from the range of disciplines we have previously identified that the research encompasses: narrative theory, children's narrative, new media, and children's cognitive development. In subsequent chapters I explore the following key issues from these disciplines: why narrative is important to humans and how it is that children's print narrative in particular has such prominence as a maker of meaning in their enculturation; how the view of traditional narrative structure as narrative arc evolved and how this view relates to children's understanding of narrative; how historic approaches to literacy, education, and entertainment for children encouraged specific characteristics in children's early print narrative experience, and whether these characteristics are applicable today. Once the print experience has been examined, the research turns to examine digital narratives: how narrative was adapted for use in new media; how children's digital narrative evolved; what characteristics the narrative experience in this new

---

medium display; how these characteristics compare to those of early print experience. Finally the research considers development theory (schema, cognition, play) as support for the presence of these characteristics. The conclusion summarizes the similarities of the two experiences and provides a set of shared characteristics.

Chapter Two describes the research methodology and the qualitative approach taken to conduct research. It identifies that the subject of study benefits from a naturalistic enquiry that is feminist in nature. It identifies that theory is built using an iterative process based on grounded theory method. It gives details of the research activities that become the road map to the research process.

Chapter Three introduces the areas of schema, cognitive development, and play. It looks at Bartlett’s schema theory as a way children conceptualize information. It then discusses the child development theories of Piaget, Bruner, and Vygotsky as a basis for social constructivist learning and a way children build a perception of narrative. It draws on the ideas of Melanie Klein and D.W. Winnicott to provide an understanding of the importance of play. It concludes with a discussion of Johan Huizinga’s and Roger Caillois’s ideas about game-based play.

Chapter Four first establishes how narrative came to be acknowledged as a maker of meaning within our society, a view that underlies our rationale for undertaking the challenge of bringing better stories to digital environments. Referencing de Saussure, Levi-Strauss, Barthes, and Genette, the chapter describes the “Narrative Turn” taken during the second half of the 1900s when narrative was freed from its literary role and was shown to be a way for people to come to terms with events around them and create meaning for themselves within their culture. Second, the chapter sets out to show that the current view of narrative structure which is considered traditional is a form developed only in the last hundred and twenty years. It shows other structures, such as epic, have had a longer history over the past 3000 years. The third part of this chapter shows how traditional narrative structure is introduced to children in elementary schools and becomes the de facto convention for narrative. The last section describes how this convention guides research about children’s understanding of narrative as well as research into narrative in games. It introduces the preschooler Anna, and her (different) views on what she likes in stories.

Chapter Five presents children’s narrative as an agent for introducing them to ideas, promoting cultural values, and structuring a worldview. Using Meigs’, Darton’s, and Jackson’s
writings the chapter shows that interactive narrative learning strategies were practiced as early as the tenth century, provides details of the development of children's literature as both education and entertainment, gives examples of genres such as magazines and moveables which are precursors of children's internet sites, and discusses the importance of schools and libraries in introducing children to narratives. The chapter then looks at the characteristics of teaching text literacy and children's text literacy experience. It brings to the fore Spufford's and Heath's histories of literacy and the print ephemera used in the home in the seventeenth and eighteenth century. It identifies the characteristics past literacy education has in common with today's literacy practices. The final section of Chapter Five discusses a recent observation of preschool and kindergarten children. The results of this study confirm that the set of characteristics identified by the historical overview are typical of children's print narrative encounters today. It also confirms that a shift occurs from presentation of narrative as experience to narrative as structure as children move from preschool to kindergarten.

Chapter Six moves the discussion into the digital environment. It continues in a historical vein showing how narrative has adapted to digital technologies by evolving in both computer hypertext and video game environments. It then discusses children's digital narrative and shows how, since the 1980s, characteristics of the narrative experience in these two genres and marketing forces both favored the rapid growth of games. The chapter provides statistics on children's increased use of games in children's information and media mix, discusses why there isn't a wide range of narratives available in games, and looks at what children gain and lose in moving from print text to digital narrative games. Finally, in context of the new media theory of scholars such as Janet Murray, Eric Zimmerman, Henry Jenkins, and Lev Manovich, it presents the characteristics of game experience that have been observed in home observations and shows their similarity with print narrative experience characteristics.

Chapter Seven summarizes the discussion, presents the characteristics of print and game narrative experiences as identified in the two preceding chapters, includes a diagram that shows the relationship between them, and describes how each of the characteristics applies to both experiences. It then provides implications of the findings and presents current work.
Chapter 2. The Process of Inquiry

This chapter addresses the issue of methodology, and presents the research strategies used in this study. It shows the iterative nature of the investigation and reflection that has built theory.

This inquiry has been undertaken in the spirit of Cedric Whitman's writing in *Homer and the Heroic Tradition*:

"... the question, like so many other intellectual problems of modernity, consists in trying to extract not a conclusion, but a justifiable attitude, an honest approach, from the detailed findings of specialized researches, with all their doubts, reservations, and suspension of judgement."75 The ideas that drive the inquiry have their foundation in over thirty years of story experiences with children in preschools, elementary schools, libraries, daycares, churches, at home, and at the homes of friends. They have been developed and refined through research conducted within a feminist methodology over the past seven years.

4.1. Unequal Encounters

The focus of my research is to understand what characterizes the perception of narrative children acquire during their early encounters with print media, the perception of narrative they then bring with them to digital media. Foremost in this research is the children's experience with narrative and the necessity of playing close attention to it.

The study of young children's experience of print narrative comes encumbered with a number of issues that need to be considered. First, children's literature carries the stigma of being unimportant; it has been “devalued and regarded as marginal or peripheral by the literary and educational communities.”76 As print became the primary means of communication, text literacy increased in importance in society, and illiteracy became a disadvantage to success in life.77 The first children's books were ABC's and primers used to teach literacy. They became associated with that period in people's lives of illiteracy and semi-literacy during which complex concepts necessary for human development were thought to be unattainable and were considered, of necessity, to be simple.78 At the same time, children's books were considered important for socializing children, and increasingly (in the nineteenth century) for entertaining them. As a critical sense of literature developed throughout the nineteenth and twentieth century, and as adults formed new views of childhood as a juvenile period of development (psychologically

---

77 Jackson. *Engines of Instruction, Mischief, and Magic*.
78 Hunt. *Criticism, Theory, and Children's Literature*. 25
immature), children’s literature was relegated to the margins. Though popular, and a lucrative market within the publishing industry, children’s literature continues to be considered inferior to adult literature: its content is often considered trivial, its text of a low-level, and its illustrations naïve. There has been some acknowledgement of the literary value of children’s literature within the last three decades as a growing body of critical theorists have explored stories, ideologies, and even the growing discipline of children’s literary criticism itself.

Second, children’s literature is written for children by adults, and their response to it is interpreted by adults. Stories are written from an adult’s view of what children would like to read, or, as is the case more often, what adults would like children to read. Many adults see narrative as an important agent of socialization, a way to impose the ideas and values of the culture on children. From a cognitive perspective, children’s response to this literature is interpreted by adults using an adult-constructed view of childhood. In addition, from a literary perspective, children’s response is also interpreted by an adult value-system, in this case, one that is based in a traditional narrative structural norm. There is an assumption that children possess this traditional narrative perspective; yet it represents a norm that does not begin to be significant in their narrative experience until they enter school. What Hunt calls the “childist” point of view does not seem to have a place in this paradigm. As shown later in McGregor’s study, this adult bias is reflected in the design and subsequent results of studies of young children’s narrative comprehension. Yet it is children who read children’s literature, children who interpret it, children who learn from it, and it is children who are the experts we should be looking to.

To these issues we add the complexity of the research encounters between adults and children – they are not peers in either relationship or communication. An adult/child power differential exists in which children are vulnerable because they lack the knowledge and experience of adults and because they are physically weaker. Communication is difficult because children do not use and interpret language in adult ways. Until very recently children were not considered competent to speak for themselves and research tended to be conducted on children.

---

79 Hunt tells the story of author Hugh Lofting’s comment that he would allow his books to be listed under the juvenile section in a publisher’s list only if the adult books were listed under a “senile” section. See Hunt. Criticism, Theory, and Children’s Literature. p. 21; Postman, Neil. The Disappearance of Childhood. New York: Vintage Books, 1992, Sommerville; C. John. The Rise and Fall of Childhood. New York: Vintage Books, 1982.
80 Hunt. Criticism, Theory, and Children’s Literature.
rather than for them. Providing children opportunities to demonstrate the way in which they construct their world requires an appreciation of the reality of these inequalities. Peter Hunt aptly states, "...children play our game because it is the only game we allow them to play. But that is only in response. Within themselves they may be reacting differently, making something different." His suggestion for dealing with these difficulties guides our research process, "...we have to challenge all our assumptions, question every reaction, and ask what reading as a child actually means, given the complexities of the cultural interaction."  

Research that moves past deep-rooted assumptions about children's perceptions of narrative and gives children their own voice is scarce. More typical are approaches such as those used in Karla McGregor's series of studies, *The development and enhancement of narrative skills in a preschool classroom* (2000). In the first of these studies McGregor looked at the narrative development of three-to-five-year olds. Though this study acknowledges differences in narrative style and form in different cultural communities, it uses traditional story structures as a basic construct for determining children's narrative development in preschool environments. The study uses nine "structural and cohesive" story elements from a "Euro-American story grammar" to determine children's comprehension of story. Because all of these structural elements were recognized by at least some of the children, this set of elements was acknowledged as characteristic of "book-based narratives" in that community. In this type of study, children respond to adult chosen content. They are not given the opportunity to provide undirected input, to have their voices heard.  

An example of research that avoids superimposition of an adult viewpoint and gives voice to children's own experience is *Prelude to Literacy*, an observation by Hugh and Maureen Crago of their daughter Anna's literary experiences. Rather than setting the scene with predetermined ideas of narrative against which to consider Anna's reactions, the Cragos observed and documented their daughter's encounters with story from the time she was eleven months old until she was five. They first kept a comprehensive diary and recorded behaviour that was clearly linked to book experiences. In addition, from the time Anna was three, they recorded verbatim what she said in each of her reading sessions. The resulting analysis was based on a child's

---

perspective of what is important when encountering a story rather than an adult’s view. It shows Anna’s preferences for narrative structures are different from the traditional ones. (More information on Anna’s preferences can be found in Chapter Three.)

The Crago study illustrates for us one other issue that is important to take into account when considering methodology. The Cragos observed Anna in their home as part of the day-to-day activities of the family. This venue provided the most naturalistic and least contrived environment from within which to conduct an observation of her story experiences. Children’s use of storybooks and of computers and game consoles is based in home activities and shared with friends, siblings, and parents. These activities consist of participation, action, collaboration, and discussion in a familiar social setting. Studying such activities in laboratory-like situations, however informally or naturalistically set, does not provide for the spontaneous gathering, playing, and discussing that arise in children’s natural play settings. It takes children out of their environment and changes the dynamics of the activity in which they are involved.89

2.1. Methodology

This study takes a feminist perspective. Feminist inquiry provides an ideology that can address the issues of concern identified in the previous section. It incorporates commonly used qualitative and non-positivist90 methods but the philosophical stance is different: it includes placing emphasis on commitment versus detachment and on the validity of all human experience in the creation of knowledge.91 This philosophical difference in point of view provides opportunities for additional insight when conducting the type of naturalistic enquiry that is most suitable for researching children’s real-world encounters with literature. Hunt suggests we could equally consider adopting the term “childist” when applying these methods for research or analysis to do with children.92 A childist perspective, along with the approaches promoted by feminist theorists, acknowledges the issue that, while all other literature is peer-written, children’s literature is not.

A feminist research perspective can address each of the four issues of concern. First, it supports studying voices that are marginalized and not generally heard. This view supports our inquiry into children’s literature. Second, it challenges the traditional view of how knowledge is

89 Fromme. “Computer Games as a Part of Children’s Culture.”
90 Positivist methods are based in the belief that society can be studied rationally and objectively. Initially formed in the early nineteenth century, these methods have been increasingly questioned since postmodernism’s challenge of an objective reality. Babbie, Earl. The Basics of Social Research. Belmont, CA: Wadsworth Publishing Company, 1999.
created as well as whose view it represents, maintaining that it is produced by power elites that are predominantly male. In this vein it also rejects that knowledge can only be produced by experts. This view supports an exploration of traditional narrative structural norms, and recognizes value in children’s experience not only in adult’s experience. Third, it strives to include participants’ active involvement in structuring data about themselves and is not reductionist in its analysis of data. This allows the participants’ voices to be heard. In our case it allows children’s voices to be heard and not diminished. Fourth, it acknowledges all knowledge as contextual and reformulates the nature of objectivity rejecting that it requires emotional and intellectual distance and detachment. This view supports my observation of children’s experience with books and games that is home-based and involves my own children and their friends.

As critical theory, feminist inquiry does not accept objective knowledge and believes that a disinterested perspective is not possible. It wants to hear people’s thoughts in their own words not a researcher’s words. It considers that there is no one truth, no pure knowledge, or one objective way to arrive at it. I’ve considered the cost and benefits of adopting such a subjective stance and recognize that a certain precision and neutrality are lost. These are exchanged for a more fulfilling and richer body of work.

It should be noted that these perspectives are not the sole prerogative of the feminist movement, though in many cases were initiated by it. The research community as a whole has moved towards their recognition and adoption. In continuing to use the term feminist we first acknowledge where these strategies come from and second acknowledge that they effected a change in the qualitative methodology paradigm. As Colin Robson points out, labeling methods feminist is, today, a matter of choice. When I take a feminist stance in my own research, I emphasize placing a value on my commitment to giving validity to children’s experience in the creation of knowledge.93

In addition to a feminist perspective, this study uses a qualitative approach in its research. Norman Denzin and Yvonne Lincoln describe qualitative research as “multi-method in focus, involving an interpretive, naturalistic approach to its subject matter... qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them...”94

The precepts of a naturalistic approach offer a way to structure my study of children’s narrative experience that allows for the changes and vicissitudes of real-life situations. In a naturalistic inquiry events cannot be extricated from their context. Understanding these events involves examining the interrelationships among all of the many parts of the whole. In such an inquiry interaction between inquirer and subject cannot be eliminated, knowledge relates to a particular context, generalizations are suspect, qualitative research methods are preferred, theory emerges from data, and research design unfolds over time in response to changing situations.\(^5\) These precepts also constitute feminist inquiry.

Cedric Whitman’s quotation, which begins this chapter, reflects that this dissertation does not seek one objective truth. Instead, my theory building challenges what is considered an objective truth – the traditional view of narrative – with the aim of de-limiting beliefs that have proven to be hurdles in the progress of narrative in digital game environments.

In addition, principles founded originally in Grounded Theory Method that are compatible with a feminist perspective guide the research strategies. Unlike other methods, Grounded Theory Method is emergent. It is not intended to test a hypothesis, rather it aims at understanding a research situation and generating the theory that may be implicit in it. This corresponds to the demands of my research problem: my studies had led me to think that the current understanding of narrative perceptions children bring with them to digital environments is not correct. There are suggestions that young children do perceive narrative differently but there is neither data nor theory concerning this idea. A vacuum in knowledge exists that needs to be filled. How to fill it? The data required will need to be qualitative in nature as it concerns children and their developing perception of narrative as they encounter it in print and games on a day-to-day basis over many months. Developing theory by basing it on accumulating qualitative data that is continuously compared is practical. The data collection effectively becomes an integral part of an iterative analysis process that keeps the data fresh when doing comparisons. In addition these principles can encompass a variety of qualitative methods, which provides options when a chosen method is not providing data that is useful for analysis.

The following section provides an overview of the process and strategies used in my research. The studies conducted are unique and it is not likely that they can be reproduced exactly. Children each have their own paradigm and each group of children their own dynamic.

---

These studies deal with the same realities that do teachers, who cannot reproduce the same results through their teaching with different classes, however constant their curriculum plan may be. In addition, in the digital world, children's environments change rapidly and influences that exist today may be gone tomorrow. Since 1995, the Nintendo company alone has introduced three major shifts in console configuration, Nintendo64, GameCube, and the Wii, and introduced more than half a dozen versions of their handhelds. These studies do, however, show characteristics that exist in children's experience of narrative in different media, characteristics that hold true in many situations, if not in all.

2.2. Research Process and Strategies

In the process of conducting my research, I've chosen strategies for their appropriateness in context of the questions being asked at the time. Over time, these have changed in response to multiple realities. They include: review of theoretical and empirical literature, ethnographic observation, surveys conducted through questionnaires and interviews, analysis of the characteristics of children's print and game narrative experience/artifacts, peer discussion, and reflection. The next section is intended to show the research process by describing studies that used these strategies and providing findings which led to subsequent research. It discusses the review of literature, two preceding studies, the extensive home observation undertaken with my three children, an informal study with my son Michael, and two formal studies conducted with children in different settings. The home observation and the preschool and kindergarten studies are discussed further in Chapter Six and Chapter Five respectively.

Review of literature – meta analysis and reflection

In order to explore the connections between young children's literature and games, I conducted an extensive literature review and accessed a diverse set of resources across several disciplines. These resources included books, articles, conference papers, empirical studies, and surveys available through traditional libraries or internet databases. The section Theoretical Underpinnings in Chapter One mentions the works and authors that have significantly influenced the direction for my research. In addition to published works, I did not hesitate to use on-line commentaries including blogs, particularly when looking at game studies. Such instant access to scholars' ideas is one of the advantages of the world wide web. The literature review took two directions. One explored historical aspects of children's print literature, including the prevailing

---

96 The work could be described as a bricolage. Levi-Strauss describes a bricoleur as a "jack of all trades or a kind of professional do-it-yourself person." In a bricolage, the researcher has constructed her/his research solution in an emergent way, using methodologies suitable to understanding the problem at hand. Qtd in Denzin. “Entering the Field of Qualitative Research.” p. 2.
approaches to children's literacy education and the history of the development of children’s
digital narrative, to see what patterns there were in children’s experience. The other explored
theory about new media, children’s literature, and child development to provide a basic
framework for analysis of the historical material and the data that was collected through studies.

Having access to a range of interdisciplinary research, which consisted of both theoretical
literature and empirical projects, provided an opportunity for a meta-analysis in which I could
make lateral connections not easily made when studying only one field. The literature review
was not an activity which prefaced the other strategies. It was part of an iterative process which
entailed a spiral of activity. As observations introduced reality, I sought the literature to make
sense of what I saw and to carry the research forward to the next stage, which in turn encouraged
more literature reviews. Such an iterative process encourages reflection at every stage.

Preceding studies

Two studies which preceded this thesis provide findings that have guided my current
research. The first study, Children’s Digital Literature Today, looked into the state of
children’s digital literature, and the opinions of authors, publishers, and librarians (2000). It
reviewed the history of children’s digital literature, and surveyed what was currently available on
CDROM. In addition, the study included questionnaires with follow-up interviews of five
children’s authors, two children’s publishers, two distributors, and fourteen librarians (though
many more were contacted), to provide their views on the use of digital technologies to either
write, produce, or provide digital narrative for the public.

There were two findings pertinent to my ongoing research. First, while digital narratives
were still being presented as print-like text and illustration, game narratives had moved ahead to
use technology in more dynamic and interactive ways. Second, authors felt that their work was
not suitable for digital environments, or that the technology was too difficult to learn to use, even
though they used websites to connect with their readers.

These findings led me to the question: If game narratives engaged children more
successfully than did digital narratives, then could understanding how different interfaces engage
children provide insight into characteristics of engagement? Would this then provide some tools
to work with to bring a broader range of stories to children?

97 Both of these studies are included in my masters thesis. Madej, Krystina. “Digital Storytelling for Children - Exploring the
With this thought in mind I designed a second study to look at children’s engagement with a progression of story interfaces, from the print page, to the print page on screen, to an animated version of story. The purpose was to identify differences in interaction to determine what the game experience brought to the reading of the stories. The study, *Books and Computers: a Literacy Observation*, was planned as a participant observation of my two sons (Michael and Daniel), age eight and six, who would read/play the same two stories in both print and digital media. The two stories used were Beatrix Potter’s *Peter Rabbit* and Mercer Mayer’s *Just Grandma and Me*. The *Peter Rabbit* CDROM presented the book in traditional book spreads which could be read much the way the book was read. *Just Grandma and Me* was an animated production and incorporated more interactive features such as animations which popped up when an item was clicked. This gave the story a game-like feel. The observation was planned so that each of the boys read the books with me individually, and then had the opportunity to read the story by himself in a digital setting. The CDROM version was read on an Apple II. The study showed that though both boys enjoyed reading the two storybooks with me, and the one digital storybook individually, they were more actively engaged by the animated digital book. In addition, when Michael was playing *Grandma and Me*, the activity on screen drew Daniel into the circle of engagement, which then became collaborative and social. The animated story engaged them more actively, and they read-played it with more enthusiasm and for a longer time than they had *Peter Rabbit*.

**Studies**

*At Home with Games: ongoing*

A naturalistic approach is useful for achieving an intimate feel of children’s use of computer and game consoles in a home environment. I designed an ethnographic observation of my own children, *At Home with Games*, to provide ongoing information of how children interact with computer and game consoles on a day-to-day basis. It was both practical and effective to observe my three children in our home – they used all the media in which narrative featured I wanted to observe for this study; they were readily observable on an ongoing basis in their natural environment; and I was already familiar with their interaction with books as well as with games. I had watched their interest in these media from a young age. In addition, friends were frequently a part of the activities at our house and added their perspectives on games to the observation. One of the strengths of an ethnographic approach is a comprehensive perspective that provides

---

98 Krystina Madej, *At Home with Games* (Surrey: School of Interactive Arts and Technology, Simon Fraser University, 2007).
for a holistic understanding. This mitigates the weakness in this particular ethnographic study that it is a small sample which might not be representative of children as a whole.

The task set was to regularly observe my three children as they played games on computers, game consoles, and handheld devices as a part of their daily activities, alone, together, and with their friends. This observation was started in the fall of 2000. Notes have been kept and were used to generate a narrative summary and a group of findings. These can be found in Appendix A and Chapter Six, respectively. The observation was characterized by two approaches. The first approach looked at the children’s activities to become familiar with their experience – observing to see, for instance, whether there was social interaction or whether game activities were undertaken in isolation. The second approach considered whether media theories regarding characteristics of game play and game properties were evident in the children’s activities – were they, as Janet Murray believed, interactive? were they spatial? did they provide agency?

The observation found that very young children (ages two to three) most often played games with their parents. As they became older children played games alone but still preferred the company of others, either friends, siblings, or parents, with whom to share their successes and the excitement of the game. The study found that children enjoyed digital narratives that were more game-like than print-like, stories that offered them more interactivity rather than more reading. It found that arcade-type action games (ludic games) provided a more intense preoccupation or engagement and often more stress than did narrative games. It found that children first chose to play games that featured favorite characters from other media as well as games they had played at friends’ homes. It found that the games offered children different types of play opportunities, such as interacting with animated versions of their favorite print stories and the opportunity to run, jump, and fly (virtually). Games also provided a wide range of spatial environments for children to play within. The observation showed that children acquired skills that allowed them to accomplish goals by themselves. It showed that games provide children with opportunities to develop characters and stories for themselves.

The preceding studies, the literature review, and this ethnographic observation identified a number of issues that required exploration. The first issue concerned children’s experience of games that were based on narratives they had already read. I was interested in knowing what play characteristics were exhibited when a player was already familiar with the story line. In this study I observed my son Michael in a familiar home setting. The second issue concerned both
hardware and software interface devices. I wanted to observe if and how interface devices affected engagement with narrative. For this study I had the opportunity to access children of different age groups who were attending summer computer classes. The third issue concerned narrative literacy practices. I wanted to confirm that the practices, which a review of the historical literature had revealed, were ongoing today. The fourth issue concerned the formal introduction of traditional narrative structure to children in school. I wanted to see if a change in approach existed between the less formal preschool and the more formal kindergarten.

**Narrative and games: intersections**

To continue the examination of children’s engagement with different narrative interfaces I planned the observation, *Narrative and Games: Intersections*, to look at the interface experience of a narrative game in which the player was already familiar with the story through print. Its purpose was to identify interface characteristics that made the game engaging and affected narrative choices. This was a participant observation of my son Michael, who was ten at the time. We used the narrative adventure game, *Harry Potter and the Chamber of Secrets* because it had been adapted from the movie which in turn was based on the book. The study included an analysis of the book content, the movie content, and the game content. It also included a subsequent interview with Michael concerning the narrative adaptation and the choices Michael made in moving through the story. The analysis of the content showed that the segments of the story that had been included in the game were those to which action could be attached. The observation and interview showed that Michael’s familiarity with the book was reflected in the choices he made: he moved into levels he thought would be more exciting quickly, not completing all the possible tasks within one level. Michael, like the story designers, was choosing his story segments based on which he thought would be more action-oriented. The observation also showed that the activities that led the action to move from level-to-level were often based in typical arcade-type jumps and throws and not in story-oriented decision-making. Success in these activities moved both the game and the story forward. It appears that, when made into games, stories such as *Harry Potter and the Chamber of Secrets* are distilled for their action and for sufficient storyline to carry this action. Rather than taking a story and developing it into a new narrative game, the designers have draped a game format that is familiar to audiences over sections of the story.

---

99 Krystina Madej, *Narrative and Games: Intersections I* (Surrey: School of Interactive Arts and Technology, Simon Fraser University, 2003).
Interface and Imagery in Constructed Settings

I then structured a formal study to look at children’s engagement with a digital environment through different interface. This study took advantage of an existing two-week summer computer course, Sights, Sounds, and CPUs, held at SFU Burnaby, that introduced children to the different technical elements used in creating a webpage: graphics, sound, and animation. The course content was geared towards each of three age groups: 8-9, 10-12, and 13-14. This course provided the opportunity to explore children’s use of interface on a larger scale (class sizes ranged from 17 to 20 children) and with different types of software applications. The initial purpose of the study, Interface and Imagery in Constructed Settings, was to observe children’s engagement with the digital environment through interface devices. Through happenstance, the three groups each had instructors with different backgrounds and agendas. It became obvious early in the study that in all three classes the social interaction between the instructor and the children and the discussions between the children themselves, together with the direction provided by the instructor and his choice of graphic content for use in the web pages, directed the children’s choice and direction for design in the digital environment they were constructing more than the interface did.

The study concluded that social interaction and content were more influential in engaging children in the digital experience than was interface technology, and suggested that future work look at narrative experience as a whole rather than focusing only on user interface.

The emphasis on experience rather than technology in engagement resulted in my revisiting children’s early print narrative encounters which form the basis of narrative understanding. A reevaluation of the history of children’s literature from a new perspective suggested that young children’s narrative encounters were also based more in experience than in any one narrative structure or medium. At the same time I explored again the work of new media scholars for theory on game characteristics. I concluded that both of these narrative encounters, print and game, were experience based, and neither relied on the traditional narrative structure which was seen as a hindrance for use of narrative in games.

The literature review resulted in a list of activities that were grouped into a preliminary set of characteristics of children’s print narrative experience. I wanted next to know if these characteristics were typical of current early print narrative experiences. As well, it would be

---

100 Krystina Madej, Interface and Imagery in Constructed Settings (Surrey: School of Interactive Arts and Technologies, Simon Fraser University, 2003).
useful to know whether a shift from story as experience, to story as structure, from preschool to kindergarten was apparent. This would, in the first instance, provide a current set of characteristics against which to juxtpose narrative game characteristics and, in the second instance, show provide confirmation of a difference in narrative view between young children and adults. In addition to the characteristics related to print narrative, the literature review resulted in a similar list of activities and set of characteristics for narrative game play. The home observation showed that these characteristics were also relevant to current children's game experience.

The Dynamic of Young Children's Emerging Narrative Process

As a final study, I planned The Dynamic of Young Children's Emerging Narrative Process to observe children in preschool and kindergarten settings. The objectives were first, to identify the characteristics of children's early text narrative encounters activities in a current setting, second, to identify if a change in approach to teaching narrative occurred between preschool and the more formal kindergarten that would cause a shift from seeing story as experience to seeing story as structure.

The study used a number of strategies. Participant observations were conducted in two different settings: a preschool, which was a play-oriented environment, and a kindergarten, which offered a more structured school environment. The observations consisted of a four-week observation of a half-day preschool class of 22 children, 13 girls and 9 boys, ages 3 to 4, and a two-week observation of a full-day kindergarten class of 16 children, 9 girls and 7 boys, ages 5 to 6. A follow-up two-day observation was conducted of the second group. Two sessions of the observation were videotaped and one was audiotaped. The audiotape was too noisy to be of value. As the observation was intended to help generate ideas not only to validate them, it was based in grounded theory method strategies: notes were taken each day; actions related to stories were drawn from the notes, these were compared on a daily basis to determine if any relationship or links existed, and categories were created; story-actions were also compared to the activities list generated by the literature review.

The two teachers of the preschool and the teacher of the kindergarten were provided a self-directed questionnaire regarding their approach towards the use of print stories in their program. This was followed by an open-ended interview. Meetings were held to review events of the day.

101 Krystina Madej, The Dynamic of Young Children's Emerging Narrative Process (Surrey: School of Interactive Arts and Technology, Simon Fraser University, 2006).
and the activities planned for the next day. For background on the children’s demographics and information on story activities they engaged in at home, parents were given a self-directed questionnaire to answer; 35 of 38 were returned.

The results showed that current activities associated with text narrative experiences are much the same in both settings as those found historically. The study found that the pre-school venue exhibits an openness to the story structure and experience, while the kindergarten venue introduces a traditional linear story structure through its program. In the preschool, stories were created aloud together in a group and, though they came from the children’s experience, they were fantastical. Print stories were used to support set cultural or seasonal themes. These were augmented by a variety of activities: song, craft, art, and playacting. In the kindergarten class, stories were discussed in more structured terms such as storyline, and associated art activities included drawing storymaps, characters, and settings. Personal journals were kept that included both writing and drawing. Contextual stories were read for seasonal and cultural events as well as to encourage behaviour such as making New Year’s resolutions. The study is described further in Chapter Five.

As can be seen from the description of the studies and the recurrent literature reviews, this was an iterative process in which studies required a revisiting of literature. This iterative process then brought the research back to reflection and consideration of the similarities in the two sets of characteristics as evidence to support theory development. The final research step juxtaposes the two sets of characteristics, young children’s print narrative experience and game narrative experience, and confirms their relationship.

This research is based in North American, European and British sources, uses predominantly English, Canadian, and American print and digital narratives, and games that are available in North America.
Chapter 3. Child Development

This chapter provides an overview of theory in the areas of schema, cognitive development, and play as it applies to child development and children’s narrative experiences.

Children’s emerging narrative process and their narrative perception are linked to their cognitive development. Children begin to make narrative their own at a very young age. As they develop, children integrate progressively more complex characteristics of narrative into their perception. Children develop cognitively through play and social interaction – these provide the means for them to access experiences that expand their range of narrative schemata.

This chapter first looks at schema theory for an understanding of how people conceptualize information within cultural contexts. It then provides the child development theories of Piaget, Bruner, and Vygotsky as a basis for considering preschool children’s experience and in particular their social experience of narrative as the framework on which they build their understanding of narrative. It draws on the idea of play as fundamental to all human development and key to children’s symbolization of the world.

Schema

We build our world through accumulated experiences and understand reality in terms of the way we represent it. Our ability to function in the world is based on how adequate our representations of the world are. The psychologist Frederic Bartlett introduced the concept of schema to provide an explanation for this representation process in 1932 while doing work on constructivist memory. He described schema as “an active organization of past reactions or of past experience which must always be supposed to be operating in any well-adapted organismic response.” For Bartlett, cognition works top down. Sets of historically and culturally contextualized information are imbedded in long term memory and help us structure our immediate reality by being there in the background, like a backstory, always on call. If we were to describe something that we are doing at the moment, we could not rely solely on short-term memory to provide sufficient information for a complete picture, we would rely on schemata to fill in the gaps.102

Schemata are dynamic. They are added to or changed each time they are referenced or anything connected to them is referenced in our day-to-day world. We experience the world unaware that schemata are in the background accumulating and adding depth and breadth to our

experience. What Bartlett calls schema, Roger Schank and Susan Engel call scripts. While Schank sees scripts as a generalization of a set of experiences, Engel sees them as socially meaningful event sequences that are “narrative in germ” or little stories. These are not story plots, but a set of actions that are meaningful to the individual. There are schemata/scripts that could be considered general to all within a society (knives and forks are set at a dinner table, radio provides news every hour, Santa comes down the chimney at Christmas) and schemata that are more specific to an individual (eating cereal before bedtime, wearing goggles to swim, doing the crossword backwards). Both are personal interpretations of events. The more familiar and richer the schema someone brings to a situation the easier it is to understand, engage with, and learn from.

From the time of their first narrative encounter, children accumulate their experiences as a set of schemata that forms their perception of narrative as a means of gaining information about the world, as a means to express what they would like to share with others, and as a form of play. Each narrative schema increases in depth and breadth as new narrative experiences are added. Children develop this schema within the social setting of their culture, adapting stories that they hear to the mores of their parents and their community. Because narrative is transposable, a child’s narrative schema of their early print story experiences makes it easier to engage with the new media they encounter as they get older, be it radio, television, movies, or digital.

Children are often exposed to narrative schemata such as those in fairytales, fables, and nursery rhymes that are common to many societies. They build individual schemata by adding their own experience of the fairytale or nursery rhyme. For instance, though children listen to nursery rhymes, they also often accompany this listening with action. In the rhyme *The Itsy Bitsy Spider*, children’s little fingers climb the spout emulating the spider. In the rhyme *The Grand Old Duke of York*, children bend down, and hop up again, as they follow the duke’s soldiers up and down the hill. Children participate in the story through these performative actions. When they read or listen to a fairytale such as *Little Red Riding Hood*, they often take on the persona of one of the characters as they repeat phrases such as “My what big teeth you have Grandma,” or fill a basket with goodies to take to grandma. Children’s individual script of the narrative includes these actions, actions that provide a sense of agency because they have helped to create the story.

---

103 Schemata are also called frames and Story Grammars.
107 Engel, *The Stories Children Tell.*
Children also enjoy the vicarious pleasure of being another character when they transform themselves into Red Riding Hood or the Wolf. In narrative digital games such as *Winnie the Pooh and the Honey Pot*, children hear the story, which provides the common or general schema, and they make actions happen (they make Pooh get the honey pot and eat up all the honey), which provides the specific schema. Because their narrative schema includes the association of actions, agency, and transformation, with narrative, the transition to narrative game play is made easier.108

**Cognitive Development**

The cognitive psychologist Piaget theorized that children, as they grow older, go through a sequence of development stages that are revolutionary. Through assimilation (knowing based on action) and accommodation (integrating this knowledge into a personal schema), important changes in cognitive structures, processes, and abilities occur. Piaget suggests this occurs at specific ages. The sensorimotor stage, until two, is when a child uses their senses and physical abilities to understand the world and can eventually represent things in their mind and pretend. During the preoperational stage, until seven, a child learns about symbols and uses them in creative play, such as using a box as a house or a car. In particular they learn about language, about the meaning of text, and they begin to learn to read. During the concrete operations stage, until eleven or twelve, children learn to do logical operations that include numerical and spatial reasoning. The next stage is the formal operations stage when children learn to think abstractly.109 Though the theory that developmental stages are tied to specific ages has been questioned,110 the stages of reasoning are used by other cognitive psychologists, such as Jerome Bruner, as a basis for learning theories.

To describe how humans create meaning, Bruner proposed a model of human development that considers different modes of learning that are sequential rather than tied to specific ages and layer rather than supersede each other. In addition to being layered at an early age, these modes can be accessed throughout our lives. Bruner’s theory provides an explanation for why some children are capable of certain advanced types of thinking at younger than expected ages. In Bruner’s system, the earliest mode, the enactive mode, is a time of spatial awareness when children learn about the world by playing with artifacts and interacting with them in a

---


predominantly non-verbal way. It corresponds to Piaget's sensorimotor stage. The second mode is the iconic mode, a time when children begin to recognize image and language, and use these to become familiar with their world. This mode corresponds roughly to Piaget's pre-operational stage.

Piaget's and Bruner's theories point to these preschool years, an age when language and imagery are being developed, as a time when perception of narrative has its formative moments. This is the time in western society when children move from an informal nursery culture to a more structured and formal educational setting. From around eighteen months to four years, children are either at home or at preschool, at around five they are entering kindergarten, and at around six they begin their first grade of elementary school. These are the years that parents and caregivers introduce children to board books, picture books, and pop-up books, and begin to teach them their letters through songs and rhymes. Young children add to their narrative schema as they begin to reason out stories for themselves in the books they explore, and as they learn to decipher the words they see in books. It is a time when much creative play is associated with print stories. Children learn to color, cut, put Lego together, and ride trains in the context of their favorite story character. They add these experiences to the perception of narrative they will be taking with them into the next mode, the symbolic mode.

At the end of the iconic mode, abstract reasoning begins to develop. This corresponds to Piaget's concrete operations and formal operations stage. Once children assimilate a story in a number of physical and cognitive ways, they transform it into scripts through accommodation, and begin to create a symbolic system that they can adapt to many narrative events. If, as Piaget and Bruner feel, the move to a symbolic system of thinking helps children encode knowledge, then the scripts that are based in their early experience are first added to, and eventually superseded, as children move towards adolescence, and formal schooling teaches them traditional narrative norms. (Further discussion on this topic is found in Chapter Four, Section Three.)

These childhood years, beginning at around six, when children's sense of narrative includes multimodal activities, are the time when many of them begin to enjoy playing narrative computer and console games, both on their own and with friends. Children's narrative perception readily accommodates the vagaries of narrative games, from those that are more narrative such as Harry

111 The computer scientist Alan Kay interpreted Bruner's three mentalities, enactive, iconic, and symbolic as doing, imaging, and symbolic mentalities to formulate his model for the Macintosh GUI, the graphical user interface with its point-and-click-on-the-icon interface. Poole, Bernard John. *Education for an Information Age: Teaching in the Computerized Classroom, 3rd Edition.* Pittsburgh: University of Pittsburgh, 2001.

Potter, to those that are more ludic, such as Mario64, as it is still relatively free of the encoding that formal schooling brings.

Both Piaget and Bruner believe that children construct their own knowledge by being actively involved with the world around them. Such a constructivist view has been used by Seymour Papert in his support of computers as a means to construct knowledge, and is the basis of much of the learning theory which guides edutainment. Children’s enactment of print stories and their interaction with game narratives are physical activities during which they actively construct their view both of these stories and of the world. Bruner sees narrative as a way that we all constitute our experience of the world. (Narrative as a means of constructing worldview is discussed further in Chapter Four, Section One.)

To his view that children learn by interacting with the world around them, Bruner adds the importance of society, culture, and context. He believes culture frames the way in which children interact with the world, and social experience is a critical factor in mental development. In this he is supported by Lev Vygotsky’s theories of cognitive development, which place great importance on social interaction and cultural contexts. Vygotsky states that not only does cognition develop within a cultural milieu, but it does so through interpersonal connections. Vygotsky argues that these connections are fundamental to a child’s cognitive development. The way children think is a product of their social interactions with family, friends, and school, and these interactions are both structured by and reflect their cultural milieu. Social interactions provide children with the means to access experience (intrapersonal), which they then incorporate into their view of the way things work (interpersonal). Without these social interactions children would not develop cognitively. The activities in which young children take part in their narrative print and game experiences, whether with a parent, family member, or caregiver, on a play date with a friend, or in a group with other young children at a preschool, fall within the type of social interactions that further their development.

In his work with children Vygotsky developed the idea of a “zone of proximal development.” A child’s “actual development level” is what they can perform on their own while the “zone of proximal development” refers to the functions and activities that they need help

The parent-child relationship that involves early narrative experience resides predominantly in this zone. Children first hear stories as they sit on their parents’ laps. Subsequently, in order to achieve literacy, constant interaction is required between parents and children as new letters and words are learned and put into context daily. Children depend on their parents for this continuous input, which eventually allows them to undertake narrative activities on their own. Both these experiences influence children’s perception of story as social interaction.

Play

Children’s experiences with narrative between the ages of three and five are quite different in nature from their experiences of print stories when they are older. These experiences are grounded in the artifacts and events of multimodal play activities. Child psychologist Melanie Klein’s theories about the primacy of play and symbolization add to our understanding of early narrative experiences. When studying how children interpret their world, Klein theorized that in playing with toys, and any artifact could be a toy including letters and words, children confer meaning on them. Children create a symbolic meaning for the artifact by investing it with their own images and feelings, and they do this only through what we call play. The meaning of the artifact that is internalized by the child is not what adults consider it to be, but rather what the child has negotiated through their relationship with the artifact within the context of their daily play.117

While Klein sees play as key to children’s symbolization of the world, child psychologist D.W. Winnicott sees it as fundamental to all human development and as universal. Winnicott believes it is “only in playing [that] the child or adult is free to be creative,”118 and that it is creative living which makes life meaningful. Without the creative impulse meaning can disappear and life can seem worthless. He says the exciting part about play is that, “the interplay of personal psychic reality and the experience of control of actual artifacts.”119 He helps us to arrive at the idea of what play is to a child by identifying characteristics of the play experience. In play a child is preoccupied with an activity; it is difficult for him or her to leave the activity and it is equally difficult for him or her to admit an intrusion into the activity. This preoccupation takes place in a personal space that is outside the child, but it is not of the external world, rather it

---

is a construct of the two: the space where an inner reality meets an outer reality. Children bring
objects or experiences into this space and impose their own reality on it; they take this personal
version of these objects and experiences, what Winnicott calls “dream potential,” and use it in the
external world. In the same vein, children use external events to suit their dream, and they
impose their dream feelings and images onto an external events. For a child, play is pleasurable
and satisfying, but when anxiety becomes too great, play reaches a saturation point and ends in
frustration. Children’s play is exciting because they put themselves in a precarious world of
shared realities: theirs, and what is objectively perceived. From this description we can see
that, for a child, play and reality are one and the same.

Play also operationalizes learning for children. They integrate artifacts and events into
their lives through their explorations in social play. Early narrative experience is essentially a
play experience during which children are building their perception of narrative.

While the work of Klein and Winnicott is based on work done with children with disorders,
more recently, the study of children and play has been given attention by educational
psychologists. Dorothy Singer, Roberta Golinkoff, and Kathy Hirsh-Pasek, provide
substantiating evidence from educational initiatives such as “Head Start” that play enhances
learning and development and that it has beneficial long-term effects on children’s cognitive and
affective development.

There is a distinction between the play theories of Klein and Winnicott and the play
theories of Johan Huizinga (Homo Ludens (Man the Player), 1938) and Roger Caillois (Man,
Play, and Games, 1961). In contrast to Klein and Winnicott, Huizinga and Caillois (in particular)
associate play with games. Although both these theorists wrote before the advent of computer
games their concepts have been adapted for use by ludologists as theory for video games.
Huizinga considers that play is a basic human instinct and is older than any culture. A key
concept in his work is the Magic Circle, a space in which the time and space of everyday life do
not apply, only the time and space of the game apply. This concept resonates when we think back
on Winnicott’s ideas about the play space a child inhabits. However, the underlying rule
structure of Huizinga’s idea of play as game moves the two theories apart. At the beginning of
Man, Play, and Games, Caillois wrote of Huizinga that his work was an inquiry into the

---

120 This is not a complete list of Winnicott’s characteristics of play. I have included only those characteristics that are applicable in
121 Singer. Play=Learning.
principles of a cultural domain, but that it did not study games themselves. Caillois’s work went on to study games and identify their characteristics. Caillois states that play, is “pure waste: waste of time, energy, ingenuity, skill, and often of money.” The characteristic he developed to understand games, in particular Paidia (free improvisation, carefree gaiety) and Ludus (effort, patience, skill), are used as categorical tools in ludic studies. Again, these characteristics have some resonance when considering the play of children, but the underlying rule structure puts them at odds with it. Thomas Apperley in his study of ludology and theories of play suggests ludologists adoption of play theories that are applied to cultural practices is an attempt to move video games from being a media form to being a cultural form. He argues that the ludic position sets the mark of difference between old and new media as play and interactivity. Defined as new media, video games are associated with play and interactivity, Apperley feels this position taking is an unwarranted liberty, given the play and interactivity inherent in other media. Apperley’s position is supported by the substantial evidence this dissertation provides that young children’s print narrative experience is an interactive play experience. The history of children’s literature provides examples of interactive print artifacts that date to the fourteenth century.

This chapter has linked schema theory, cognitive theory, and play theory to our topic of young children’s print narrative and game narrative experience. With these foundational ideas in place, we turn to addressing the key issues in the exploration of our topic.

---


Chapter 4. Perspectives on Narrative

This chapter presents the global and literary perspectives of narrative that underlie subsequent discussions. It provides examples of how traditional narrative structure is taught in schools, and how it is used in research. It then provides an example of one young child's view of narrative.

This chapter shows how narrative was freed from literature and became recognized as a way people made sense of their world through a narrative turn in the humanities during the mid-1900s. Narrative came to be acknowledged as a cognitive style across disciplines as varied as education and health sciences. It is this importance narrative has as a maker of meaning that encourages our exploration of its use in digital environments.

This chapter then takes a literary perspective and presents a historical overview of narrative's development. The purpose is to show that within this long history, what is currently considered classical or traditional narrative structure – beginning, middle, and end with an introduction, climax, and denouement – has been the dominant structure not since classical times, but only since the end of the nineteenth century. If we look at narratives from the time of the Homerian epics, we see that structures such as epic and entrelacement, which place less emphasis on sequence, on formal beginnings and endings, and on plots, have been more enduring and more in accord with the process of people’s lives. In the late nineteenth century, climactic plot evolved to be a critical element of narrative, and the basis for “traditional” narrative structure. Since then, this structure has been reified and has been held up as a model by textbooks on narrative. Many theorists in communication media such as radio, television, and film, and more recently games, have used it as a basic tenet in their theoretical work.

In addition, the chapter shows how educational approaches in English Language Arts curricula in the elementary and secondary schools in North America perpetuate the narrative arc as the basic narrative structure and the de facto convention for narrative. As such, it is used as the litmus test for what constitutes narrative in research as diverse as children’s understanding of narrative and narrative use in games. When this structure is seen as the norm, it unnecessarily narrows and biases how we look at narratives in emerging genres such as games.

---

125 Doody, The True Story of the Novel, Ong, Orality and Literacy.
126 Ong, Orality and Literacy.
4.2. Global Perspective: Narrative Turn

Business gets narrative religion

In 2001 and 2003 the Smithsonian Institute presented the conference “Storytelling: Passport to the 21st Century” with speakers which included John Seely Brown, Chief Scientist at Xerox, Larry Prusak, Executive Director of the IBM Institute of Knowledge, and Steve Dinning, former director of Knowledge Management at the World Bank. The conference highlighted the “purposeful use of narrative to achieve a practical outcome” and explored “how storytelling will become the key ingredient to managing communications, education, training, and innovation in the 21st century.”

Steve Dinning, when first exploring the possibilities of using narrative in business, became aware of the following view of narrative:

*I quickly found I was living in an age when storytelling was suspect. Scientists derided it. Philosophers threatened to censor it. Logicians had difficulty in depicting it. Management theorists generally ignored it. And storytelling’s bad press was not new. It had been disreputable for several millennia, ever since Plato identified poets and storytellers as dangerous fellows who put unreliable knowledge in the heads of children and hence would be subject to strict censorship in The Republic.*

Our society espouses the scientific method as the best way of knowing. The rationalism (logic) of the Greeks and the empiricism (direct observation, recording and monitoring of the world) of the seventeenth and eighteenth century are two identifiable and dominant aspects of the scientific tradition. This rational-empirical approach came to characterize scientific enquiry and was adopted for the study of society in the nineteenth century by the French philosopher August Comte. Comte believed society could be studied scientifically and understood objectively through observation in a logical and rational manner rather than through religion and metaphysics. He called this scientific approach positivism. The positivist view has been challenged over the centuries by “relativists” who argue that there is no final truth about which we can all agree. Theories of how we know have changed over the years to include the value of perception, dialectics, and mysticism, among others. Yet the belief that there is an objective world which can be known, and known objectively (objectivism), and the authority of the scientific method, still characterize our own time and many of our research communities.

---

During the first half of the nineteenth century a "Linguistic Turn" occurred in the fields of philosophy, the humanities, and the social sciences that had its origin in the theories of the Swiss linguist Ferdinand de Saussure. De Saussure saw language as a social phenomenon and centered his research on the underlying system of language rather than the use of language. The focus of study in these fields changed from the object itself to a meta-level - to the relationship between the object and the language of its representation. The structuralist movement looked to explore the relationships between elements (such as linguistic signs) and in doing so uncovered basic social-psychological tasks/events that are part of peoples' lives everywhere. Pertinent to our later discussion of children's approach to stories is the work of anthropologist Claude Levi-Strauss. Analysis of structural relationships in kinship and culture led Levi-Strauss to believe that everyone, everywhere, looks at the world in terms of binary pairs, and in particular in binary opposites: hot/cold, light/dark, good/evil. One of these, he found, is always being favored: light is better than dark, good is better than evil. Levi-Strauss’s interest led him to study myths as cultural artifacts through which people explain and understand these patterns and value schemes by narrativizing them.

When structuralists used objective and scientific classification schemes to deconstruct meaning in narrative and to codify ideas they took narrative out of its normal context and positioned it as a "semiotic phenomenon that transcends disciplines and media." Literary critics, such as Roland Barthes, freed narrative from literature when they argued that it crossed media and supported different types of communication and cognitive activities such as art, dance, and music. Critics of the early structuralist movement, such as Gerard Genette, saw its "scientific" approach as pretension and felt the movement was being degraded to "mindless technicalness." They argued against objectivity and for the influence of cultural context. Meaning in narrative became inseparable from the context of human action with stories linking actions and events into a whole and providing for their significance. These ideas continued to develop through the works of literary critics such as Gerald Prince, who says, "[narrative] does

132 Saussure's idea was that a word has meaning only in relation to other words. This was different from the views of his contemporaries who studied the sound of a word as it affects the nervous system. Besley, Tina. "Foucauldian Influences in Narrative Therapy: An Approach for Schools." Journal of Educational Enquiry. 2.2 (2001): 72-92.
not simply record events; it constitutes and interprets them as meaningful parts of meaningful wholes…". From a psychology viewpoint, Donald Polkinghome has shown narrative to be ubiquitous to humans, a fundamental component of how people shape their worldview, and “a primary form by which humans experience meaning.”

As narrative became recognized as a cognitive style and discourse genre that people could use to understand their lives, it was espoused by diverse fields of study such as education, family therapy, business, and health sciences.

In education the view at the time, that analytical thinking is a more advanced form of cognitive functioning and growth, began to shift to a consideration of knowledge as existing and growing in context. Educational theorists began to think that constructing meaning through stories improved learning.

In counseling and psychotherapy, narrative was first used in family therapy in the 1980s. Practitioners felt narrative provided cultural context for and legitimized personal viewpoint within the social construction of meaning. Further to this, narrative offered an opportunity for agency and transformation through self-authoring in an empathetic and self-affirming environment.

In business organizations, where both the formal and informal channels of communication function as dispersers of stories and builders of organizational culture, narrative was seen to provide the opportunity for people to look at their role within the organization in a new light. Narrative opened up opportunities for employees to re-author their place within a community that shares their risk of doing so.

---

In health sciences, narrative is now being used to improve delivery of health care by situating individual accounts of disease, disability, and trauma within a wider context and finding how they deviate from the norm.\textsuperscript{144}

In these disciplines – education, psychotherapy, business, and health care – narrative provides an opportunity for people to construct meaning for themselves because of a number of attributes they believe it possesses. It is authentic and credible. It makes sense and provides context. It provides familiarity in its use of schemata to introduce new ideas. It has emotional impact. It is subjective. It passes on behavioural lessons by providing a context for them. It provides opportunity for agency and for transformation. It is easily remembered. It endures. It is cross-cultural.\textsuperscript{145} Given these attributes, storytelling can be put to use to, as mentioned earlier, "manag[e] communications, education, training, and innovation in the 21st century."\textsuperscript{146} Narrative is now viewed more than ever as a social enculturation phenomenon.

4.3. Literary Perspective

Traditional narrative structure

Today’s discussions surrounding narrative, in all media, are often grounded in the concept of a classical or traditional narrative structure: The Aristotelian Narrative Arc. This structure has its origins in \textit{The Poetics}, the philosopher Aristotle’s (384 – 322 BCE) treatise on narratives of the Golden Age of Greek literature: dramatic tragedy, comedy, epic and lyric poetry. It is based on a number of the components Aristotle identifies as critical to dramatic tragedy.\textsuperscript{147}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{Aristotle_arc.png}
\caption{Aristotle's narrative structure represented today}
\end{figure}

\textsuperscript{144} Raoul, \textit{Narratives of Disease, Disability & Trauma.}
\textsuperscript{145} These attributes have been explained more fully in a study of the role narrative plays across disciplines. See Madej, Krystina. \textit{Narrative: Making Meaning in Interactive Digital Environments.} Burnaby: (SAGE) Simon Fraser University, 2004.
\textsuperscript{147} Aristotle identifies the components of dramatic tragedy in Chapter Six of \textit{Poetics}, "There are six parts consequently of every tragedy, as a whole, that is, of such or such quality, viz. a Fable or Plot, Characters, Diction, Thought, Spectacle, and Melody; two of them arising from the means, one from the manner, and three from the objects of dramatic imitation; and there is nothing else besides these six." Aristotle, \textit{The Poetics}, trans. Ingram Bywater (Boston, MA: Digireads.com, 2005). Book 6. Available at http://www.authorama.com/the-poetics-6.html
Figure 4.1 shows today’s view of Aristotle’s narrative structure. Contemporary audiences will look at this visualization and find the structure obvious – much of today’s writing follows this pattern. Aristotle’s contemporaries, the audiences of ancient Greece, would not find it familiar; its simple and sequential nature does not reflect the complexity of drama, or the form of epic, in Aristotle’s time. In Orality and Literacy, Walter Ong explains that the audiences prior to Aristotle’s day had little experience in organizing even short, climactic linear plots. The type of tight organization that exists in plots consisting of a beginning, middle, and end, with a sequence of cause and effect events, was not possible to achieve in stories that were not written down. Unlike the majority of the literary forms of the time, the dramatic tragedy “was the first verbal genre and for centuries was the only verbal genre, to be controlled completely by writing.”

Because of this, literary critics in the sixteenth and seventeenth century could use components of the form to discuss print text dramas. In the eighteenth and nineteenth century, the evolution of the novel as a genre included the evolution of plot as predominant in the structure that became known as the Aristotelian Narrative Arc. Other integral parts of the dramatic tragedy, such as spectacle, no longer maintained the value they once held.

The Aristotelian Narrative Arc, also known as Traditional Narrative Structure consists of components which existed in Classic dramatic tragedy, and are present in narrative today. They provide an introduction into our discussion of the narrative structures that predominated literature for centuries.

Aristotle defines dramatic structure as a unified whole and requires it be “complete in itself.” He identifies the qualities of beginnings and endings:

... let us now consider the proper construction of the Fable or Plot. Now a whole is that which has beginning, middle, and end. A beginning is that which is not itself necessarily after anything else, and which has naturally something else after it; an end is that which is naturally after something itself, either as its necessary or usual consequent, and with nothing else after it; and a middle, that which is by nature after one thing and has also another after it. A well-constructed Plot, therefore, cannot either begin or end at any point one likes; beginning and end in it must be of the forms just described.

Aristotle emphasizes that the middle of the story, a sequence of cause and effect events, must have substance and be of sufficient length to show a turn of experience:

---

148 Ong. Orality and Literacy.
...a Story or Plot must be of some length... As a rough general formula 'a length which allows of the hero passing by a series of probable or necessary stages from misfortune to happiness, or from happiness to misfortune,' may suffice as a limit for the magnitude of the story.

The longer the story, if it can maintain its comprehensibility, the “finer [it is] by reason of its magnitude.” However, Aristotle also underscores an important attribute of dramatic tragedies: unlike epics, these were unique plays, whose structure and length must be of an appropriate length to be performed for an audience.

To further clarify the action in a tragedy, Aristotle describes the action from beginning to middle as “complication,” and from middle to end as “denouement”:

Every tragedy is in part Complication and in part Denouement... By Complication I mean all from the beginning of the story to the point just before the change in the hero’s fortunes; by Denouement, all from the beginning of the change to the end.  

In the continuing explication of dramatic tragedy, Aristotle presents elements of the dramatic tragedy that are necessary to it, but which are unfamiliar to today’s audience and are not reflected in “Classic” or “Traditional” Narrative Structure:

... a tragedy has the following parts: Prologue, Episode, Exode, and a choral portion, distinguished into Parode and Stasimon; these two are common to all tragedies, whereas songs from the stage and Commoe are only found in some.  

These elements were integral to the way story was revealed. They were important to audiences of ancient Greece because drama to them was not about climactic plot that was unraveled, but about myths which were revealed by a singer or singers, and an all-seeing chorus.  

Audiences were familiar with the rhythms, repetitions and episodes of the oral epics, the older verse form sung by rhapsodes for centuries to pass on the culture’s history and legends.  

The oldest and the most famous of these are The Iliad and its sequel, The Odyssey. These originated as myths and histories passed down during the Greek Dark Ages. Once Greek writing had developed into its modern form at about 800 BCE, they were refined and

---

151 The dramatic tragedy enjoyed a presentation that was more complicated than the one evoked by today’s interpretation of its formalized linear structure of “beginning, middle, and end” with “complications and denouement.” Aristotle. The Poetics. Book 12. Available at http://www.authorama.com/the-poetics-12.html.
152 Aristotle. The Poetics.
153 This was a period between the collapse of the Mycenaean culture, about 1100 BCE, and the rise of Ancient Greece, about 750BCE, when the writing, crafts, and commercial networks which had existed were abandoned and little cultural progress occurred. Whitman. Homer and the Heroic Tradition.
They are attributed to the bard Homer, and written sometime between 800 and 600 BCE. The style of these epics was once thought of as “Homeric” style, however closer examination by classical scholars during the mid-twentieth century showed that Homer’s epics are representative of an “archaic” style, the style of antiquity which reflects a different way of thinking and a different way of presenting characteristic of oral cultures. Archaic style is more synthetic than analytic in its choice and presentation of events and encompasses features of oral composition and delivery such as stock lines, repeated passages, and circular themes.

The purpose of the epic of antiquity was to keep “great deeds” from perishing from the mind. It was sung by rhapsodes, bards, or singers over many sessions because it consisted of an accumulation of historic events that were extensive and complex. Structurally it could never support a chronologically sequenced climactic plot such as is used in today's conventional narrative.

The epic could not support a linear plot philosophically either. Until the “concept of historical truth” came to the Greeks with the writings of Thucydides (460-400 BCE) “the truth which the Greeks found in their epics was that which lay in a myth’s reenactment of the spiritual allegiances of a people.” The chronology of events had little importance in a presentation of a people’s image of themselves; the importance was in the action that represents meaning. In refining the stories told and retold about Greek history/myth, Homer’s purpose was to present the heroic character of the Greek people, not to present it logically, or with historical or chronological accuracy. He accomplished this not through presenting abstract ideas or discussing the psychology of the characters and events, but through concrete action that enforced favourable or unfavourable characteristics embodied by “type” characters.

When a singer performed, the sequence of episodes chosen as appropriate for the performance depended on the event. Only occasionally was the entire epic told; this would occur

154 The Mycenaean alphabet of Greece, before the Dark Ages (1100 – 800 BCE), was not conducive to literature. The writings that have remained from this time are records that concern themselves with trade, such as inventories and receipts. The language that arose at the end of this time provided for a better transliteration of Greek language sounds and afforded for transcription of the oral epics of the time, those attributed to Homer being the earliest.

155 Cedric Whitman disabuses us of the idea that an archaic mind is a lesser mind. “Homer’s mind is the archaic mind, pre-philosophic, primarily synthetic rather than analytical, whose content is myths, symbols, and paradigms. It is not a primitive mind, however, for the archaic, pre-conceptual way of thinking has a maturity of its own, fully as valid as later modes, and, to judge from Homer, perhaps more valid. In any case, such mentality is a more fruitful source for poetry than the mind trained to logical and philosophical analysis, for it meanings cluster iridescently around nuclear images, with the complexity, and the explosive power, of high-valence atoms.” Whitman. Homer and the Heroic Tradition. p. 13.

156 Ong. Orality and Literacy.

157 Thucydides is considered the first writer of scientifically presented history, that is, history in which there are no gods intervening. He recounts the war between Sparta and Athens in History of the Peloponnesian War. Whitman. Homer and the Heroic Tradition. p. 17-18.

158 “One must cease expecting Homer to satisfy... rational logic... Homer lived four hundred years before logic of any kind was expounded.” Whitman. Homer and the Heroic Tradition. p. 12.
at a major fair, would take many days, and include a number of singers. In both cases the bard began his recitation with a formal beginning: he would tell the audience the complete subject matter of the poem and follow this with an invocation to the poet’s divine inspiration, his muse. Subsequently, rather than setting the scene for the action, he “hastens into the action and precipitates the hearer into the middle of things.” Only later in the recitation, in the form of flashbacks, does the singer provide the details for how the action came about.

Oral recitals depend on memory, and singers of the long narratives of the epic would use the ring-composition as a mnemonic device. The bard, singing, begins and ends each incident with identical or very similar formulae to give the narrative coherence and to give both himself and the audience a way to orient one event to the next. Homer’s Iliad consists of a series of nested episodes that balance each other through similarity or antithesis of heroic and cultural themes in a repetitive formula such as ABCCBA that a bard could access at any point. Cedric Whitman’s chart of the nested structure of Homer’s Iliad is shown in Appendix B.

The use of flashback, as well as of ring composition, is related to the rhetorical device of hysteron proteron that Homer uses to advantage. Homer places events he considers more important first in the story, even though chronologically they should not appear until later. In The Odyssey, for instance, he begins the story by introducing Telemachus, his son, and describing his search for his father and his mother’s difficulties with suitors. This is many years into Odysseus’ journey. When Homer does introduce Odysseus, he has been captive on Calypso’s island for seven years. He escapes on a raft and is shipwrecked. He is then rescued by Phaeacians who help him get home to Ithaca. We learn of his adventures when he tells the Phaeacians about his journey. Telemachus meets him when he arrives home, and together they solve the problem of the suitors. The story is back where it started, only after many tumultuous adventures.

The oral epic endured through antiquity into medieval times. Over time it evolved, and in the Late Medieval period gave form to the romance. Originating in France, the romance was a lengthy narrative consisting of many episodes of chivalrous adventure written in verse. It was linked together not by national or historic themes but by the idealized virtues surrounding

---

159 Ong, Orality and Literacy, p. 139.
161 In this instance, Homer uses yet another device, a frame story, to further his epic. He conveniently uses Odysseus’ journey home with the Phaeacians as an opportunity to present the set of shorter stories about the adventures of Odysseus over his twenty years of wandering. Chaucer’s Canterbury Tales are another example of a frame story.
162 The term romance (a narrative translated from the French, a romance language, and hence the name) was extended to include works that originated in the classics, or were newly authored but were always of similar content. Cross, Wilbur L. The Development of the English Novel. 1963 ed. New York: The Macmillan Company, 1899.
chivalry and love. The verse of oral tradition was considered “high language,” suitable to inspire virtue by telling the heroic deeds associated with love and was told predominantly at court. The romance was often characterized by an entrelacement structure in which multiple narratives were “interlaced.” A set of stories was told simultaneously; characters and incidents were juxtaposed, contrasted, or compared in the different sets of events. This technique is evident in one of the important prose romances of the thirteenth century, *Lancelot*, that recounts the adventures of a number of knights. The knights’ stories parallel each other, as first a part of one story is told, to be followed by similar events in the next story. The common motifs and juxtapositions throughout encourage reflection rather than offering a climactic plot or hurrying the reader to quick end.  

The adventures of the knights are invariably filled with jousts, routs, and ambushes, the one good knight valiantly defending his lady’s honor, or saving a beleaguered fellow knight from a blackguard. The knights were anything but fainthearted and would stand up well in today’s game world.

Less idealized and more realistic folk stories, of greater interest to the common man (and lesser nobles), evolved as shorter forms such as the verse tales of England and the novas of France. With the increased use of the vernacular, or the language of the people, in writing, and increased literacy, there was a corresponding increased use of prose in narrative. In the fourteenth and fifteenth century the fabliau (satires or short funny stories) of France, and the novella of Italy, were two of the genres that found a popular audience in English translation. These shorter narrative forms consisting of fables, lives of saints, and tales of knights-errant, among other topics, increased in popularity and satisfied the demands of a new commercial book trade that had its start even before the emergence of the printing press. Such works were called “novels” \(^\text{164}\) (from the Spanish novela) and histories in England. Although literacy was increasing and the body of readers growing, literacy of the masses was still in the future and such works had a limited audience of wealthier lords and ladies. Epic tales of heroes were still told in the halls of noblemen and at festivals celebrating the seasons or religious events by bards who passed them on, one to another. The popular ballad and humbler folk stories were also presented at festivals by singers and professional storytellers. The storytelling modes at the time included the great Mystery, Miracle, and Morality plays that religious events such as Corpus Christi Festival supported. As with the Dythirambs of Ancient Greece that were the precursors of the dramatic

---

\(^{163}\) A beautiful translation of this prose novel into Dutch verse can be seen at http://www.kb.nl/galerie/100hoogtepunten/004-en.html  
David Quint suggests that interlace of chivalric romances strongly influenced the narrative structure of Cervantes’ *Don Quijote* with its “interpolated episodes” and “myriad knights and ladies who zigzag across the map of his romance.” See Quint, David. *Cervantes’s Novel of Modern Times: A New Reading of Don Quijote*. Princeton, N.J.: Princeton University Press, 2003. Interlace is also seen in contemporary literature such as Tolkien’s *Lord of the Rings*.

\(^{164}\) Different from its later use, “novel” was used in England in the 1400s to connote any short story that had a revealing incident.
tragedy of the Golden Age of Greece, these religious festivals led to the popular plays of Elizabethan England.

From the time Gutenberg’s presses rolled out their first mass-produced work (Ars Minor, a Latin grammar) in the German city of Mainz in 1452, print literacy, initially a privilege of a religious, political, and wealthy elite, began to spread to include ever larger portions of the population from all strata of society. Approximately eight million books were printed between 1452 and 1500. As more print in the local language became available, universal literacy became an objective for a public that wanted to improve its opportunities. In addition to books, print materials in the form of broadsides, playing cards, tracts (pamphlets), chapbooks (inexpensive paperbacks), and newspapers became an important means of communicating, and stories were adapted to all of these forms.

Epic and then romance, first in oral form and then as manuscript, predominated in the narrative world for approximately 2,200 years (800 BCE – 1400). With print, these forms began to give way to local interests, and the changing ways of print production. Stories now moved back and forth between oral and print forms fluidly. An example of this is the very popular Guy of Warwick, a story that originated as an epic and was sung throughout the Middle Ages. Guy was made into a manuscript sometime between the thirteenth and fifteenth centuries, while still being sung in taverns and at village fairs; in the sixteenth century a shortened version was printed as a broadside ballad, distributed as a print artifact, and, also performed; in the seventeenth century, in its shorter version, it became a popular chapbook, the ubiquitous cheap paperback of the age, available to the poorest classes; in the eighteenth century, a longer version, closer to the original epic ballad, was printed as a chapbook. The Guy stories maintained elements of their epic origin: they depicted concrete action – feats of daring that define heroic; they used formulaic images – dragons and giants; and they consisted of repetitive episodes that could easily be removed without affecting the storyline.

As stories were adapted to the new print forms from both an oral and a manuscript tradition, the technology used to print books dictated practical changes to narrative structure. Aspects of orality such as mnemonic aids that incorporated rhyme and cadence were no longer necessary as the print version itself could now be used to store what previously must be passed on by older learned individuals and memorized. More practically, orality knew no chapter headings, no pagination, no paragraph breaks, traits that had become a part of manuscript format and to which the first printed books adhered as well. Gutenberg's first bible provided a continuous stream of information, word after word, column after column, and page after page. More so than manuscripts that maintained an "oral dialogue" presence through margin notes and were often used for reading aloud, print text needed to incorporate into its "final" form something to replace the nuances of oral presentations. In response to these needs, editors introduced the use of punctuation to represent the cadences and intonations of oral speech. Punctuation provided a point of view to give readers a reference point from which to understand the work. Previously, this would have been provided by the actual presence of the orator/actor and his/her manor of presentation. Punctuation also introduced visuals as a reference point and as a means of emphasis or of clarification.

Editors were a new addition to the production cycle of the book. The new technology offered those who composed type, and those who edited it, the opportunity to develop new devices to make the text more available to readers. Title pages and chapter headings were introduced. These together with indexes, content pages, footnotes, and different sized types were adopted quickly because the "highly commercial and competitive character of the new mode of book production encouraged...any innovation that commended a given edition to purchasers." With time these additions and the resulting formats became fixed by publishing demands for uniformity and encouraged a different approach to organizing structure for stories.

Publishers made changes to provide readers with more accessibility to text and used their editorial discretion to make changes in the narrative structure so that it was suitable for their "market." This is particularly evident in William Caxton's treatment of *Morte d'Arthur*. The development of print literature was in its infancy when in 1458, Caxton, England's first printer, opened his business and offered English books printed in England to the English public for the

---

171 Ong. *Orality and Literacy.*
first time. Both a printing and publishing entrepreneur, Caxton made decisions about books he printed based on the marketplace he knew. 174

The main literary genre at the time was the *romance*. Fictional short stories in prose were only beginning to make an appearance as a genre. Sir Thomas Malory had written a number of separate stories in this new vein, each of which was complete in itself. Caxton, believing that there was a better market for a book of the familiar *romance* genre, took this series of independent stories, and with minimal editing issued them as one. Malory, in a French prison at the time, couldn’t object. The resulting lengthy narrative is rambling, unwieldy, and not unified. Consisting of episodes, it moves backward and forward in time without obvious reason, is repetitious, and is without “one final, decisive combat.” 175 In the form Caxton finally gave it, the prose story has elements of the verse *romance* – it is episodic, without a linear plot, held together by the heroic deeds of chivalrous knights; but it is unwieldy in its collected form. Because the formulas and repetitions are not written purposefully into the narrative, they are haphazard and confusing rather than being a referent to past events and an introduction to future ones. Malory’s stories, each of which he had intended as complete in itself, were representative of a change in the way stories were being framed even before the emergence of the printing press. In the fifteenth century, there existed a new, wealthier clientele that was interested in reading and could afford to purchase texts. The commercial book trade already existed in this late manuscript age, and the new print era allowed this trend to develop and flourish. Use of the local language instead of Latin further encouraged the use of prose. As prose became more fashionable, respectable new genres arose. 176 Mallory’s stories were a movement towards the *new novel* of a few hundred years in the future, with which today’s audiences are familiar. 177

With the evolution of print, more stories were being written as text prose. Longer written work could be more easily reviewed and rewritten by writers. By the late seventeenth century, the structure of longer fictional works began more closely to follow a unified and sequential structure. Ong draws the structural connection between oral epic, novel, and drama for us, “The print world gave birth to the novel, which eventually made the definitive break with episodic structure, though the novel may not always have been so tightly organized in form as many

---


176 Ong. *Orality and Literacy.* p. 140

177 Interestingly, Malory’s *Morte d’Arthur* had been held up as an example of the *romance* style of interlacement in which stories are interwoven to bring out their similarities or contrasts, when a newly discovered manuscript (1934) provided quite a different view on his writing. See Meigs. *A Critical History of Children’s Literature.* p. 27.
plays. Unlike oral performers, print authors could outline stories, and organize and manipulate the chronology of events. Writers now had the tools at hand to create a unified plot: they could be selective about choosing events and arrange them to show causality, they could create a tighter story, and they could provide “a firmer sense of closure.”

This new affordability coincided with a growing interest in the narrative theories of Aristotle. *The Poetics* was unknown in the west until the twelfth century when Averroës, an important religious judge, physician, and philosopher of Cordova, in Muslim Spain, provided commentary on the work as it had been studied in the near east (Constantinople). Both *The Poetics* and Averroës’ commentaries were translated into Latin over the next two centuries. Not until the translations and commentaries by writers in Italy in the sixteenth century, did Aristotle’s theories gain importance in the west. By the end of the sixteenth century, *The Poetics* was being debated in France, Spain, and England, as well as in Italy. The numerous “commentaries” on Aristotle’s work reflected the growing influence of his theories on the narrative of the time.

By the eighteenth century the “new” novel had evolved. Twentieth century theories of how the novel evolved, and consideration of what might be the first novel, range from the traditional discussions of Cross (1927) and Watt (1967) of Daniel Defoe’s *Robinson Crusoe* (1719), Samuel Richardson’s *Pamela* (1740), and Fielding’s *Tom Jones* (1749), to Margaret Anne Doody’s (1996) more inclusive discourse on the continuous existence of novels since the writings of antiquity. Doody comments that the novel, as restricted by its narrow definitions in the nineteenth and twentieth centuries, led to the creation of illegitimate novels which reflected

---

178 Ong, *Orality and Literacy*, p. 145.
179 *The Poetics* was preserved in the East by Islamic cultures. Averroës (1126-1198), a medieval Spanish-Arab philosopher who lived in Cordova, Spain, when it was under Muslim rule, reintroduced Aristotle to Western Europe with a Latin translation and commentary. Numerous translations into both Latin and into the vernacular of *The Poetics*, along with commentaries in the fifteenth and sixteenth century in Italy, reflected the growing influence of Aristotle’s theories as they were interpreted for drama at that time. See http://www.theatredatabase.com/16th_century/italian_dramatic_criticism_ofth_renaissance.html and http://www.kirjasto.sci.fi/averro.htm.
the romance and the epic, and to the creation of separate genres such as science fiction, which previously had existed within the mainstream.\(^\text{182}\)

In the mid nineteenth century Gustav Freytag, a German writer and journalist, offered an analysis of the classic five act dramatic tragedy in his 1863 book *Die Technik des Dramas*.\(^\text{183}\) He proposed a model for dramatic structure based on the specific function of each act. The first act is an exposition, or setting of the story that includes an event which initiates the action. The second act presents the rising action, or the conflicts the protagonist engages in to reach his/her goal. The third act is the climax, and provides a turning point for the worse. The fourth act sees the action coming to a close, with the protagonist losing. The fifth act of the tragedy provides a catastrophic ending, in which the protagonist finds himself in a worse situation than at the beginning of the drama.\(^\text{184}\)

Though developed around the dramatic tragedy, this structure could be applied to other writings such as comedies: the climax provides an upward rising action for the positive, the falling action sees the protagonist winning, and the end is viewed as a denouement in which the protagonist finds her/himself better off than before.

**Figure 4.2. Traditional narrative structure**

The combination of Aristotle's and Freytag's theories in a structural model proved itself useful in discussions and criticisms of all narrative genres and increasingly became the convention not only for drama, but for short stories and novels as well. The elements consist of continuous and unified action, with an encompassing beginning, middle, and end. There is a linear plot made up of an exposition, complications, a climax or turning point, falling action, and

\(^{182}\) Doody, *The True Story of the Novel*.

\(^{183}\) Gustav Freytag (1816-1895)

denouement. Ong suggests that the most obvious use of this model is the mystery story. In its simplicity and single-minded approach to reaching a climax, the basic mystery story is an exemplar of the climactic linear plot. \textsuperscript{185} Figure 4.2 shows the different elements of what has come to be known as the traditional narrative structure.

When such a structure is adopted as the norm for narrative, the implication is that all narrative requires rising tension and high points, or climaxes, to be satisfactory. This is, however, only the case in certain types of narrative. The different approaches to structure that have been used throughout narrative’s history, such as episodic, entrelacement, and frame, and the modernist and post modernist experimentation since this model evolved, are not reflected in it. \textsuperscript{186} Nevertheless, it continues to dominate as a norm for all narrative in each new media that is developed.

There are a number of possible reasons for this perception. One, the increase in literary materials, and the subsequent rise in literary commentary and criticism that occurred since the translations of Aristotle’s theories in the early Renaissance, created a new need for a baseline for analysis and comparison. At the end of the nineteenth century, critics found this new model, with its emphasis on plot, useful for analyzing literature in which the genre of the novel was becoming increasingly dominant. Two, the increase in organizational and mandatory education that occurred during the end of the nineteenth century (discussed in Chapter Five), created a need for literary standards that could readily be adopted by the curriculum of the day. At a time of increased institutionalization, the need for a critical standard encouraged the use of an available, useable model.

When new communication media (film, radio, television, digital) emerge, they adopt and repurpose or remediate this traditional structure. Even though each medium explores and creates its own aesthetic, the structure of print narratives has been the standard applied to narrative in all media. Such a story structure readily lends itself to remediation in new communication media such as radio, television, and film in which control stays with the author. \textsuperscript{187} For digital media in which interactivity and the opportunity for control of story by the audience is possible, the remediation of print narrative norms is more complex. \textsuperscript{188} The appropriateness of narrative’s use with game play in particular has been argued extensively. Computer adventure games were first

\textsuperscript{185} Ong, Orality and Literacy.  
\textsuperscript{186} Phelps, The Single Climax Dramatic Structure.  
\textsuperscript{187} Bolter, Remediation: Understanding New Media.  
seen as a new type of interactive narrative. Underlying the discussions concerning narrative’s appropriateness for the new media was the classic narrative structure. The game designer Greg Costikyan clearly identifies for us the understanding of narrative that game designers (and society in general) have in his article *Learning from Fiction* (1988): “The first and most important difference between story and game is that stories are linear. That is, they have a beginning, a middle, and an end.” Here he equates beginning, middle, and end with linearity. Costikyan concludes with, “The basis of all gaming is decision-making and the exploration of outcomes. The basis of all fiction is plot and character. To equate the two is to make a bad mistake.” If we consider Homeric epic with its interest in presenting the character of a people through events, and romance with its interest in presenting values through valourous deeds, we should question the categorical view that fiction equates with plot and character.

By the late 1990s, as more theorists entered the field with new viewpoints on narrative and games, the arguments heated up. Ludologists argued that classic narrative principles were fundamentally incompatible with the interactivity of games; narratologists argued (among other things) that games can produce dramatic encounters that are storytelling in nature. Jesper Juul, a ludologist at the heart of the “clash between games and narrative,” suggests in *Games Telling Stories* (1999) that there are similarities and differences, but that “at heart” we must allow for distinctions. Media Scholar Henry Jenkins argues a middle road in *Game Design as Narrative Architecture* that acknowledges the narrative’s tremendous potential and encourages its evolution as a spatial environment within gameplay. Bride Mallon and Brian Webb, researchers into the nature of narrative and games, note in *Stand up and take your place* (2005) that a key issue in the debate is “the usefulness of applying traditional narrative-analysis to games” and that “a consensus has been reached that not all aspects of traditional narrative theory apply to interactive narrative.” The debate over whether games are a suitable delivery medium for narrative is unlikely to ever be concluded (loyal adherents being what they are), but in reviewing it briefly we can see that the concept of traditional narrative structure underlies many of its arguments. The belief that stories are necessarily plot-based is one which creates barriers to exploration in the


190 The term “ludology” was proposed by Gonzalo Frasca in his article *Ludology Meets Narratology: Similitude and differences between (video) games and narrative* (1999) to refer to the study of games. It has been adopted to mean the study of games from a humanities rather than an engineering perspective.


kinds of narrative that can be used with interactive games. Let us look at how these barriers have been erected and are being kept in place.

4.4. Narrative Concepts in Schools

Traditional narrative structure is introduced as a formal concept to children in elementary school from kindergarten upward through language arts curriculum. The concept of this structure is reinforced in middle schools, high schools, and in universities, as well as in day-to-day events of mainstream life. Books and websites which provide advice on writing stress the importance of using basic narrative structure when composing story. Literary critics provide story analysis for books and films in terms of climactic structure. Traditional narrative structure, classical narrative structure, basic narrative structure, and climactic structure are different names for the same thing: the current narrative norm. The concept of a traditional narrative structure as the norm for conventional narrative genres spans less than two hundred years; other structures have been in far greater use both before and since the idea took hold at the end of the nineteenth century.

This next section explores how school curriculums introduce traditional narrative structure at kindergarten and then continually reinforce its use.

School curriculum

Classic narrative structure is taught across North America as well as in English-speaking countries such as England and Australia in the educational system’s language arts curriculum. One aim of curriculum developers is to make “independent and fluent” readers who are familiar with conventional narrative structure. The process of developing this familiarity continues throughout elementary school and can be seen in examples that I examined from English Language programs in Georgia, Illinois, and Washington State in the U.S. and the Province of Ontario and the Western Protocol (BC, Alberta, Saskatchewan, Manitoba, Yukon, and (at the time) Northwest Territories) in Canada. These programs show a progressive approach to introducing narrative structure in the elementary years. To support teachers in delivering curriculum materials, resources such as the Oral Resource Book and the Writing Resource Book, developed by the First Steps Program, are used by both public and private schools teachers in

195 I had direct experience and was familiar with language arts curriculum in Illinois, Georgia, and B.C. After a search of what was readily available for review via the internet I chose two additional programs that were well structured and in which narrative goals were easy to understand, Ontario and Washington State. The sites can be accessed at: Office of Superintendent of Public Instruction, Washington State at http://www.k12.wa.us, English/Language Arts – CUSD #4 at http://www.champainschools.org/, Language Arts – Pacesetter English at http://www.picaso.cobb.k12.ga.us/, The Ontario Curriculum, Grades 1-8, Language at http://www.edu.gov.on.ca/eng/curriculum/elementary/language.html, and The Common Curriculum Framework for English Language Arts, Kindergarten to Grade 12 from the Western Canadian Protocol for Collaboration in Basic Education at http://www.wncp.ca/ela/ela.html
Australia, England, Canada, and the U.S. In addition publishing teacher resources, educational publishing companies such as Pearson Education provide “leveled books for guided reading” through programs such as “Ginn Reading Steps.” These books take advantage of the same progressive approach to developing an understanding of traditional narrative structure.

Curriculums in programs across the continent show evidence of a common ground. Learning outcomes are similar, though they may be categorized differently and identified or named differently. In addition, concepts are introduced to children at slightly different ages. The learning outcomes range from concept driven general outcomes – “enhance the clarity and artistry of communication” (Western Protocol) – to specific outcomes – “distinguish between fact and opinion” (Washington State). The purpose of the review is not to compare programs but to note the language used in reference to story and story elements and identify how story was progressively introduced throughout the grades with regards to the concept of traditional narrative and elements of its structure. With its highly specific approach to identifying outcomes, the Washington program provided the most useful (and easily identifiable) examples of language arts teachings grounding children in conventional narrative mores.

Washington State’s Reading Grade-Level Expectations provides a precisely identified set of expectations that help teachers guide children through the process of understanding text. Very comprehensive, the guide divides learning outcomes into thirteen categories that are age dependent. The assumption of a traditional structure is most obviously seen in Component 2.2, a component in all the grades, which speaks to the need for children to “Understand and apply knowledge of text components to comprehend text.” Within this category there are two areas that most interest us: “Understanding story sequence” and “Understanding story elements.” The complete progression of outcomes in these categories from Kindergarten to Grade Five is shown in Appendix C.1. Figure 3.5 shows the skills that can most obviously be associated with the concept of the traditional narrative. Briefly, the program takes children from retelling stories using “beginning, middle, and end” in kindergarten to identifying “the major actions that define the plot and how actions lead to conflict or resolution” in Grade Five.

---

196 These books are part of the Rigby-Heinemann, Harcourt Education roster of teacher resources. See http://www.harcourteducation.com/au/contact.htm
197 Resources are available for both teachers (study guides) and students (story books) and are grade related. See http://www.pearsoned.ca/school/LanguageArts/hrs.html
198 To its credit, this program also identifies alternatives through inclusive language such as the note, “Story telling order can differ between cultures. For example, in some cultures the end of the story is told first,” that is included with the “Understand story sequence” category.
Kindergarten
- Retell familiar stories using a beginning, middle, and end.

Grade One
- Retell stories with correct sequence of events.

Grade Two
- Retell text focusing on the problem or events in sequence.
- Recognize and use sentences, paragraphs, and chapter structure to understand the organization in both informational/expository text and literary/narrative text

Grade Three
- Understand sequence in informational/expository text and literary/narrative text.
- Explain story ideas or events in sequential order.

Grade Four
- Recognize and explain literary/narrative text written out of sequence
- Identify the main events in a plot, including the cause and effect relationship in problem solving.
- Identify and use text written in the text organizational structures of cause and effect and order of importance to find and organize information and comprehend text.

Grade Five
- Identify the major actions that define the plot and how actions lead to conflict or resolution.

The other programs surveyed have similar learning objectives. The Western Protocol program outcome under “Understand Forms and Techniques” for Grade One reads, “relate or represent the beginning, middle, and end of a variety of texts.” For Grade Three it reads, “identify the sequence of events in a variety of texts, the time and place in which they occur, and the roles of main characters.”

The Ontario Language Curriculum expectations for Grade One include “organize information so that the writing conveys a clear message (e.g. describe events in the proper sequence: We went to see the dog. I liked him very much. We took him home on the bus).” In Grade Two children will “organize ideas in a logical sequence (e.g. write stories that have a beginning, middle, and end).”

The Cobb County School District (Georgia) Student Literacy Expectations for Kindergarten include “sequence pictures to tell a story.” In Grade One they should be able to “include
beginning and end of story” when writing. By Grade Three they will “recognize explicit and implicit cause and effect relationships in short selections.”

The Champaign School District (Illinois) has a reading and writing timeline for students that is more ambitious, requiring that kindergarteners be able to “use prewriting strategies to generate and organize ideas (e.g., focus on one topic; organize writing to include a beginning, middle and end; use descriptive words when writing about people, places things, events). Reading goals for the end of Grade One include being able to “identify the literary elements of theme, setting, plot, and character within literary works.” In Grade Two students will “Give complete story retelling with characters, setting, problem, events, and conclusion.” By Grade Four students will “Describe how literary elements (theme, character, setting, plot, tone, conflict) are used in literature to create meaning.”

The Champaign School District provides descriptions and examples of the type of books children progress through on their way to becoming the silent reader mentioned at the beginning of this section. The district provides characteristics of books in level A & B (kindergarten) some of which are: “single idea or simple story line, print clearly separated from pictures, most books have 1-4 lines of text per page.” Characteristics of books in level M (end of Grade Two) include: “long, with lots of text per page, smaller print, and narrower word spacing.”

In addition to curriculum outcomes that provide for a grounding in “traditional narrative structure,” resources for teachers such as Rigby Heinemann’s Oral Language Resource Book do so as well. Appendix C.2 provides an excerpt from the Resource Book that presents what is recognized by educators as a child’s “Beginning, Developing, Consolidating, and Expanding” understanding of narrative. This curriculum takes children from little or no understanding of organization and sequencing of narrative elements to understanding “all elements of narrative structure... setting, problem and resolution.”199

Once children are thoroughly indoctrinated in a traditional structure they are introduced to new genres and alternative structures, particularly in middle and high schools. Indeed, exploration of new and different structures is often encouraged. The structures are, however, considered to be divergent from a textual norm.

199 Allen, Leanne. Oral Language: Resource Book. First Steps: Education Department of Western Australia. Port Melbourne, Australia: Ridby Heinemann, A Division of Harcourt Education, 2004. This is one of a number of language resource books that is used by the kindergarten teacher who participated in the observation at Mulgrave School, West Vancouver, BC, Canada. Introduced to the series while teaching kindergarten in London, England she has adapted it for use with BC’s Language Arts curriculum..
At a university level, where the study of non-conforming literature is more than likely the norm, the convention of the linear climactic plot still defines the foundation on which much critical analysis is based. University narrative courses references such as Michael Toolan’s *Narrative, A critical linguistic introduction*, and Nick Lacey’s *Narrative and Genre: Key Concepts in Media Studies* reinforce this idea. Toolan sees “sequenced and interrelated events” and “crisis to resolution progression” as defining features of narrative.²⁰⁰ Lacey writes, “What distinguishes narrative from other forms is that it presents information as a connected sequence of events. The most basic narratives are linear sequences… moreover this sequence is not random; it structured logically. Most narratives structure their sequences causally, each event logically follows on from the previous one; each event causes the next one….”²⁰¹

Web-based resources are now commonplace for all levels of education. In university settings where students work more independently of the education system, they are probably as influential in students’ language arts education as are print resources, if not more so. Numerous sites exist to help students understand narrative; these sites reinforce the norm. Sites such as RSCC Online Writing Lab under Short Stories/Novel, for instance, provides explications of literary terms. This site defines *Plot* as “The arrangement of ideas and/or incidents that make up a story” which consists of attributes that follow traditional narrative structure closely.²⁰²

- Causality – One event occurs because of another event
- Foreshadowing – A suggestion of what is going to happen
- Suspense – A sense of worry established by the author
- Conflict – Struggle between opposing forces
- Exposition – Background information regarding the setting, characters, plot
- Complication or Rising Action – Intensification of conflict
- Crisis – Turning point; moment of great tension that fixes the action.
- Resolution/Denouement – The way the story turns out.

Along with the resources specific to Language Arts curriculum, there are also general resources for children’s literature such as *Children and Books* by Zena Sutherland and May Hill Arbuthnot. Used as a resource for college and university children’s literature courses, books such as this compendium provide a comprehensive introduction to children’s books in print. Sutherland and Arbuthnot give educators an overview of different literary genres, from ABC’s for young children to historical fiction for adolescent readers, and suggest ways to approach teaching literature to children. They remind teachers that “Books are written for children, but adults buy

²⁰² http://www.rscc.cc.tn.us/owl/writingcenter/OWL/ElementsLit.html
them," and that standards for evaluating the quality of books both for pleasure and for educational purposes are helpful to educators.  

There is, on the one level, the need to look at a book with "mind and heart, interest and sympathy," and on the other, to go beyond the emotional response and examine the elements which produce the response. Sutherland and Arbuthnot identify these as setting, character, plot, theme, style, and point-of-view. In describing plot, they follow the classical narrative structure:

A plot is basically a series of actions that move in related sequence to a logical outcome; if there is no sequence or interaction, the book may have a series of episodes rather than a plot or a story line. Simple as it sounds, a story needs a beginning, a middle, and an end. First the author must set the stage. Then, to have development and momentum, a plot needs conflict, opposition, or a problem. Last there should be a definitive ending: a climax of action or even a strong indication of future resolution.

Plots for young children are simple and generally without subplots, while for older children plots are more complex and may have "many threads." In the teacher resource book, Literature and the Child, Bernice Cullinen also presents a traditional outlook on narrative structure:

The narrative is developed through the plot—the temporal events or actions that lead to the solution of the problem—progresses to a climax, or solution to the problem, and ends with a resolution, or closure to the story.

Cullinen also states that setting, characterization, plot, and theme are the important basic elements to consider when evaluating books. These are but two of the resources available for educators that reinforce the standard of a traditional narrative structure in children's literature.

We can see from the preceding examples that from the time they enter school, and throughout their language arts education, children are progressively taught that the traditional standard for story is a linear sequence that presents events progressing to a climax and ending with resolution and closure. By the time they are young adults and their language arts education is complete, children have been thoroughly indoctrinated into the belief that such a narrative structure is both traditional and the norm. Seymour Chatham, in Story and Discourse, reaffirms that certain narrative conventions are naturalized by audiences who absorb the convention and forget that it is a convention. This naturalizing phenomenon is another reason that has led to

204 Sutherland. Children and Books. p. 37.
205 Sutherland. Children and Books. p. 42.
207 Cullinan. Literature and the Child.
208 Chatman. Story and Discourse, Narrative Structure in Fiction and Film.
western society's current affirmation of the Aristotle/Freytag model as our traditional narrative structure.

The stance that sequential plot is the paradigmatic structure diminishes the importance of other narrative structures, some of which are much closer to the process of human experience and expression. Climactic structure that is a product of dramatic criticism cannot sustain the diversity of narrative that the human condition warrants and that structures such as epic, entrelacement, and even frame models do reflect. The direction we take for constructing a broader framework from which to conceptualize narratives for all media needs to include this important understanding – that narrative is based in process and experience rather than structure.

Representative research

As research into children’s experience of narrative seldom reflects a child’s point of view, it also seldom reflects other than the norm of traditional narrative structure in its discussions. Research that uses this norm ranges from studies of the development of children’s narrative skills to articles on game design: Karla McGregor’s article *The development and enhancement of narrative skills in a preschool classroom*, speaks about basic narrative abilities and temporal sequencing of action. Sandy Louchart’s presentation *Unscripted Narrative for Affectively Driven Characters* implies that only Aristotle’s narrative structure existed from his time to Propp’s, and Greg Costikyan’s article on game narratives, *Learning from Fiction*, tells us that “stories are linear. That is, they have a beginning, a middle, and an end.” There are many other examples of research for which traditional narrative structure underlies rationale for argument. It should be understood that when used as a standard, this narrow view does not adequately reflect the existing range of narrative expression western culture has enjoyed over 3000 years, and may provide equally narrow conclusions.

4.5. Different Paradigms

Studies such as McGregor’s show that early intervention in children’s experience of narrative between the ages of three and five provides for development of traditional narrative literacy moving from descriptions of objects and events to include causal and temporal sequencing of actions. If this intervention does not occur children do not easily recognize these
patterns of storytelling as they move into their early school years, and have a more difficult time accessing the print materials they are provided.\textsuperscript{214} Bruner in \textit{Actual Minds, Possible Worlds} tells us that “human mental activity depends for its full expression upon being linked to a cultural tool kit – a set of prosthetic devices….\textsuperscript{215} Traditional story structure is the narrative prosthetic device of choice in western culture. When provided this device, children develop a traditional sense of narrative as they move from the iconic to the symbolic stage in their development. They develop a different sense of narrative when they are not provided this device. Anna’s story shows us a different sense of narrative.

\textbf{Anna’s view of narrative}

In “Prelude to Literacy: a preschool child’s encounter with picture and story,” Maureen and Hugh Crago describe the emerging narrative process of their daughter from the ages of one to five, before she learns to read.\textsuperscript{216} In presenting their daughter Anna’s narrative process during these years, they provide insight from a child’s point of view rather than from an adult’s. Three conclusions they arrive at provide insights that are tantalizing in light of the structure of game narratives.

The Cragos conclude that the traditional plot, character, and theme structures we traditionally assign to narratives do not seem to be useful in looking at the narrative experience of young children. Their observations show that Anna’s basic structural unit is a short binary episode that consists of an event followed by its opposite, rather than an entire composition. Generally this episode is dramatic or has emotional appeal. An example is the little rabbit losing his birthday gift to the Sheriff in Disney’s \textit{Robin Hood}, followed by Robin giving the little rabbit a bow and arrow as a gift. The general binary pattern of these “chunks” is one of loss and restitution, but not necessarily; it is sufficient that the episode have two parts such as “two opposed characters dialoguing’, or ‘protagonist-acting.”\textsuperscript{217}

Contrary to traditional narrative theory, Anna saw stories as a series of binary dramatic incidents and assigned beginnings and endings to ritual status or considered them verbal tags without any connection to what went between. She was impatient with setting the scene at the beginning of a story. At the end, typical conclusions seemed to be rejected as unimportant or

\textsuperscript{215} Bruner. \textit{Actual Minds, Possible Worlds}.
\textsuperscript{216} Crago. \textit{Prelude to Literacy: A Preschool Child’s Encounter with Picture and Story}.
\textsuperscript{217} Qtd. in Hunt, \textit{Criticism, Theory, and Children’s Literature}. p. 72, Crago. \textit{Prelude to Literacy: A Preschool Child’s Encounter with Picture and Story}.
redundant. Once the dramatic incident was over she consistently stopped listening to the story. There were stories in which she didn’t recognize the ending for what it was and asked what happened next, with the expectation of hearing more episodes.

Longer, novel-type stories, Anna saw as a string of dramatic incidents or episodes. An important factor in linking these episodes was the presence of a central important character. The Cragos offer the example of the characters Luke and Jim in the story *Jim Button and Luke the Engine Driver*. In this story “Luke and Jim’s lengthy quest for the Chinese Princess Li Si is the unifying device.” Anna got to know these characters and brought this comforting familiarity with her to what she considered each new episode.

At the age of five, after having heard hundreds of stories and discussed them extensively with her parents, Anna still maintained episodes of “binary opposition” as the structural units within her perception of narrative.

To summarize briefly, Anna’s view of story does not follow traditional structure. Anna saw the beginnings and endings of stories as rituals and not as necessary elements in the story. Her preference was to listen to the main event or the action in the story. She often left off listening once the action had taken place. This action preferably consisted of a binary opposite such as losing something and then finding it. She enjoyed longer stories that she saw as a string of such actions when they were connected by a familiar central character.

**Summary**

Narrative was disassociated from literature and shown to be transposable to other disciplines during a “narrative turn” in the humanities in the mid-twentieth century. It subsequently came to be acknowledged as a way to structure meaning and worldview. From a global perspective narrative provides context and significance for human action. It is this view of narrative as a maker of meaning that underlies our interest in expanding the scope of narrative in digital games, the ultimate purpose of this research.

Traditional narrative structure evolved as a combination of Aristotle’s narrative arc of beginning, middle, and end, and Freytag’s climactic plot. It is a recent development and is neither traditional nor classic. Other narrative structures, such as epic, have adapted and endured for considerably longer within the 3000 years of narrative development, and better reflect the process of life. However, English Arts curriculum in schools establishes the traditional structure as the

---

This norm guides research in a range of disciplines such as education and games that explore narrative use. There are three reasons for the reification of traditional narrative structure as a narrative norm: literary critics need for a standard against which to compare new literary works (late nineteenth century), educational institutions requirements for standardized curriculums (early twentieth century), and the naturalization of these conventions (throughout the twentieth century). As a contrast, a study of Anna Crago's views of narrative, developed between ages one to five, shows she sees narrative structure differently. For her, beginnings and endings have only ritual importance, and binary actions or events and favorite characters hold the day.

Viewing climactic plot as a paradigmatic structure diminishes the importance of all other narrative structures. The critical theory associated with climax that is a product of dramatic criticism cannot support the breadth of narrative structure that existed even before the addition of digital narrative. Assuming a restrictive norm cannot but limit the direction that exploration of narrative takes. It denies a rich source of different forms of narrative expression on which to draw, and fails to support the genres being explored within digital media today.
Chapter 5. Children's Narrative and Ways of Making Meaning

This chapter presents the history of children's narratives and shows stories' use as a means of enculturing children. It looks at historical and contemporary literacy practices. It presents an observation of children's narrative experience in preschool and kindergarten, and provides a set of practices that reflects both historical and contemporary narrative experiences.

In his article *An Introduction to the Structural Analysis of Narrative*, the literary theorist Roland Barthes speaks of the ubiquitous nature of narrative, of how it enables people to construct their individual life story, and of how it provides cultures with a way to share their beliefs and transmit values. In the previous chapter we learned that this idea of narrative or story, as a fundamental cognitive style for understanding the world and a means for constructing meaning, evolved as a theory during the second half of the twentieth century. Though the theory is relatively new, adult's use of narrative as a means to provide for their children's understanding of society and their place in it, is not. Narratives have long been used to shape experience and put life events in context in a child's world.

This chapter aims to provide a historical perspective on children's text narrative as it evolved to become the predominant means of enculturation for centuries and to identify the practices that are associated with bringing story to children. It looks first at how oral and then print cultures provided opportunities for children to construct meaning of the world for themselves. It considers the effect on both content and formats of the shift in philosophy from didacticism to entertainment, from the interactive learning strategies of tenth century orality to the physical interactivity of movable books available at the turn of the twentieth century. While doing so, it looks at changes in the customary practices associated with narrative experience that new ideas in social thinking and education theory initiated. In addition, it draws from this history the issue of literacy, showing the practices associated with literacy education that have become typical over the years. Compiling narrative and literacy practices, it provides a baseline from which it considers a current observation of young children's narrative print experience that affirms their continuing use.

5.1. The Role of Narratives

A narrative or story provides an aesthetic structure for presenting the day-to-day cultural experiences of home and community. Stories are found at all times in history and in all places of the world; they are central to the human experience. They are the "primary form by which human experience is made meaningful."\(^{219}\) Stories are a repository of a culture's agreed understanding

of the world, manifesting ideals and philosophies as well as facts.\textsuperscript{220} Stories pass culture from generation to generation within a society. They teach children about the norms of their society and help them construct and maintain their identity. Provide children from different backgrounds with the same story to interpret, and each will interpret it in her/his own way, based on the understanding s/he has developed growing up within a distinct society.\textsuperscript{221} Parents, philosophers, writers, educators, political and religious leaders through the centuries have used stories as a tool to influence and shape attitudes and actions.

Stories are reflections of the growth, conquests, and reformations of the ages in society.\textsuperscript{222} Although created at a historical moment in time, they are not isolated in that time. They constitute a dialogue between the present and the past, a dialogue in which the author's interpretation of history influences how s/he tells the story. A dialogue exists between the storyteller and the listener as well, and during this dialogue the story may change.\textsuperscript{223} This is part of narrative's heteroglossic nature: while there are social forces such as church and state that aim to maintain cultural narratives as a constant, there are other social forces, both incidental (street songs) and major (invasions), by which cultural narratives are continuously buffeted that make them take on new meaning and tone. In turn, these changing stories reflect back and have an effect on those same social forces. As it is told in subsequent generations, a folktale alters, if only subtly, reflecting the changes in society.\textsuperscript{224}

5.2. Providing for Social and Cultural Learning

\textbf{Orality}

In looking back to the origins of children's stories (English language), we travel past the time when stories were created specifically for children, past the earliest time of printed books, past medieval manuscripts and mystery plays, to when stories were told before fires in cottages, and when ballads were sung in the halls of fortifications. The children's culture of today was still far off in the future, and there was little distinction between the entertainment for children and the entertainment for their elders. Children shared in both the work and play of the community, and they were always a part of the audience. The old folk stories were at once a way to explain the mysteries of the world, to revere these mysteries, and to provide comfort against their incomprehensibility. They were also a historical record of the events, attitudes, and ideologies of

\textsuperscript{222} Meigs. \textit{A Critical History of Children's Literature}.
\textsuperscript{224} Bakhtin. "Discourse in the Novel."
the society as it had evolved. Local lore reflected the influences of invading cultures such as Roman or Danish, through their assimilation of foreign gods, goddess, and heroes.225

As the written word came into common use in the centuries before Christianity, it was not always accepted or considered beneficial. As Plato records in The Seventh Letter, spoken discourse was Socrates’ ideal: “No serious student of serious things will make truth the helpless object of men’s ill-will by committing it to writing.... When one sees a written composition one can be sure, if the writer is a serious man, that his book does not represent his most serious thoughts; they remain stored up in the noblest region of his personality.”226 Despite contrary beliefs such as these, writing survived and its authority evolved. Because of the cost and time of its production, and because of the limited literacy among the general population during the first common era centuries, only those who were wealthy and those with religious and secular power used script. The written word was used to set the standard or the rule for a given situation. Through its association with those in power, it became the authority. By the sixth century, for instance, the Church proscribed the precise structure and wording for church services in all local communities through pamphlets it issued. Text, provided by those in religious authority, replaced the spontaneity and autonomy that had existed in these communities.227

Before the advent of printing, the family was the hub of a child’s education and the members of the community were the spokes. As children grew, they assimilated the rich and complex norms of their society and learned their culture in informal ways through imitation of what they saw around them and through instruction from family and community members.

Watch, listen, repeat, and learn

In the middle ages, when the tradition of storytelling and instruction was oral, wandering bards and minstrels told stories and sang ballads. Children listened, “joined in the refrains of ballads,”228 and in this way learned histories, folktales and religious stories. From the tenth to the sixteenth centuries the Church, the predominant authority of the time, communicated its narratives through Mystery, Miracle and Morality plays (See Figure 5.1).

Troops of players stopped in villages and at castles during major celebrations. The characters in the plays, with their varied voices and different costumes, brought forth images in

the mind rich in religious meaning and children learned about symbolism and about allegory by
listening and by watching. Originally staged by the clergy, town guilds began to present these
plays after a 1210 church edict forbade clergy acting on a public stage. Though in many cases the
proscribed contents of these plays was maintained, as in the case of the passion plays, once the
local community was provided with a structure and an opportunity for performance, they used
this avenue to present plays that reflected events and concerns of their day-to-day lives.229

Figure 5.1. A mystery play in the village square

In wealthy homes manuscripts were a treasured possession. Masters used these
manuscripts to teach children by rote. They included books of courtesy such as Aristotle’s ABC
(an alliteration of proper conduct) which taught manners and standards of place, primers which
taught the alphabet through verse, and catechisms which provided the moral teachings of the day.

Before the eleventh century two types of formal educational establishments existed, both
organized by the church. These were The Song and Grammar Schools and private monastic
schools. In both these schools, as in private homes, the master or tutor taught lessons by rote
from scribed manuscripts. The master read; the student was expected to learn through repetition
of the readings. Lessons included Latin grammar, rhetoric, logic, geometry, and music. The
schools aimed at educating children, mainly from the landed gentry and lesser aristocracy, for the
laity, for the priesthood, or for membership in a religious community.230

Creative interplay: dialogue and learn

An important rarity among the manuscripts used by Masters was Aelfric’s Colloquy,
believed to be one of the earliest texts written that is aimed specifically at children. Aelfric, a

230 Demers, Patricia & Gordon Moyle. From Instruction to Delight: An Anthology of Children’s Literature to 1850. Toronto: Oxford
University Press, 1982.
tenth century hagiographer and teacher, wrote the *Colloquy* to teach Latin. Designed as a dialogue, its interactive nature encourages the student to answer questions as an assumed persona: monk or ploughman, fowler or merchant.\(^{231}\) The creative interplay on the part of the student was different from the rote response required by most learning situations of the time.\(^{232}\)

The *Colloquy* introduced interactivity and decision-making through roleplay. Topics of relevance to the student provided context for the lesson, and the colloquial exchange brought learning Latin to a less intimidating (and probably less boring) level. In using context and interaction to help engage children in learning, Aelfric moved from an instructionist to a constructionist approach. As an educator he provided his students with "a better understanding of the content matter under investigation," through a better use of their interaction with the print medium.\(^{233}\)

Though a dialogue, this manuscript was still mainly handled by masters, seldom by students. Children learned, even with this greater interactivity, through listening and responding orally. Only the child destined to become a cleric and needed to be able to read, actually held the manuscript. Chaucer has the Prioress describe such a scene in his Canterbury Tales.\(^{234}\)

> This litel child, his litel book lerninge,  
> As he sat in the scole at his prymer

**First Narrative Artifacts: Text and Image**

The advent of the printing press in Western Europe in the 1450s increased access to knowledge by making books more readily available. The authority of manuscripts (and the religious and secular powers that produced them) would soon be challenged by a wide range and large quantity of mass-produced print that allowed for the spread of ideas — both humanistic and scientific — on an unprecedented egalitarian scale.\(^{235}\)

\(^{231}\) Demers. *From Instruction to Delight: An Anthology of Children's Literature to 1850.*

\(^{232}\) Classical education at the time of Socrates and Plato relied on a dialectic process. Plato described this as "rubbing ideas together and subjecting them to 'tests in which questions and answers are exchanged in good faith and without malice so that finally, when human capacity is stretched to its limit, a spark of understanding and intelligence flashes out and illuminates the subject at issue.'" In this case, the dialogue is aimed at teaching language rather than ideas. O'Donnell. *Avatars of the Word.* p. 20

\(^{233}\) Madey. “Towards Digital Narrative for Children: From Education to Entertainment, a Historical Perspective.”


\(^{235}\) Until the mid-seventeenth century church and state maintained authority by licensing printers and dictating what materials were publishable. During the brief period of time from 1641, when the Star Chamber, which provided the English King’s authority over print, was dissolved, and 1643, when the Ordinance for Printing was instated, the presses exploded with people's ideas. The number of pamphlets printed increased from 22 to 1,966. Griscom, Amanda. *Trends of Anarchy and Hierarchy: Comparing the Cultural Repercussions of Print and Digital Media.* 1998. Brown University. Available: http://www.cyberartsweb.org/cpace/misc/mini.html. 9 September 2005. Dudley, Robert, Char Miller and JoelClark. “Democracy in America.” *Understanding Media: The Inside Story.* Washington, DC: Annenberg/CPB, 1997, O'Donnell. *Avatars of the Word.*
Although manuscripts were available to only a few, primarily wealthy, children, with the mass-produced hornbook of fifteenth century, print materials became available to many. Hornbooks, consisting of a simple wooden paddle to which was attached a page of text protected by a clear piece of horn, were used until the seventeenth century, and in some instances, longer. Figure 5.2 shows three images from this era of learning: a master with a pupil, a hornbook, and a battledore. The content of these simple but durable books was most often either a prayer or an alphabet.

A century after the hornbook, the battledore came into use. Made of paperboard and printed on three panels consisting of six pages that folded in on each other, the battledore made a compact sturdy book that could be shared and passed on for years because of its durability. It invariably started with the Lord’s prayer but contained a range of narrative material including alphabet rhymes, riddles, fables, and illustrations. Block printing had made illustrations less expensive to incorporate with text, and battledores used pictures to accompany and enliven their text and facilitate learning. Though these books were more entertaining than unadorned bible text, their main purpose was to “teach the child to read and thereby to pray.” No longer were stories only read at children. Children now had text and image at hand to handle and interact with physically.

Figure 5.2. Hornbooks and battledores were used until the nineteenth century

The engagement that the new combination of text and image effect ed is attested to by the landmark book, Orbis Sensualium Pictus. This book, written in 1658 by Johan Amos Comenius, Bishop of the Unity of Czech Brethren and an educational innovator, is considered the first illustrated textbook in which words and pictures are intended to support each other for the

236 From the Elizabeth Ball Collection of children’s books in the Lilly Library at Indiana University in Bloomington. More images are available at http://iupui.edu/~engwll/hornbook.html
238 Demers. From Instruction to Delight: An Anthology of Children’s Literature to 1850. p. 3.
purposes of explaining natural phenomenon. Used to teach Latin, the *Orbis* consists of an illustration depicting the contents of the text, with Latin juxtaposed with the vernacular below it for ease of reference. This could be done only in print and not orally. Comenius’s approach was so popular that *Orbis* was translated into many languages and was in use for over a hundred years.239

Figure 5.3. Orbis Sensualium Pictus: Visible World
Comenius used illustrations and juxtaposition of text to bring both an interesting format for teaching Latin to students but a wealth of knowledge about the known world as well. 240

Comenius had gone beyond what educator Richard Brandt calls the “straight port” or using the new technology to do things the same way as was done with the old technology.241 Much as Aelfric extended the possibilities of oral teaching to include the interactivity of cultural role-playing, Comenius looked beyond the traditional and obvious to extend print text’s capability to communicate meaning to children.

By the end of the seventeenth century, “England was saturated with the basic equipment for learning to read,”242 Children could now learn about their world not only from family and community but from books as well. The aspiration to literacy was, in many cases, the result of such religions as Puritanism and Scottish Presbyterianism that professed that knowledge of the Holy Spirit was achievable by reading the Bible. The Puritans, whose strong religious views resulted in persecution and immigration to the New World, also saw “the formation of the young as an awesome responsibility” and used print text to bring their doctrines to children.243 The desire for literacy resulted in the establishment of small village schools in many areas across Britain that were taught by either local women or itinerant male teachers.

240 Images from the Elizabeth Ball collection of children’s books in the Lilly Library at Indiana University in Bloomington.
Literacy began to spread across all classes and educators encouraged young children to be taught to read even before starting school. Thomas Tryon (b. 1641), the son of a poor tiler and plasterer who learned to read from his workmates and became a well-reputed preacher and educator, recommended that mothers teach their children how to read from “a Year and a Half or Two Years Old.” Tryon’s teachings, discussed in the context of literacy at the end of this chapter, recommended that children be taught not through strict rote but by showing them artifacts with their letters and by relating this learning to their daily lives in an enjoyable way. Such an approach encouraged the development of a nursery culture in which mother’s provided literacy education to children in the home.

Linda Pollock, in Forgotten Children, shows the interest parents had in educating their children. She identifies for us that reading and writing were taught by mothers as well as tutors: “[Slingsby’s] daughter was taught by her mother so that by the age of 5; ‘she is able already to say all her prayers, answer to her catechisme, read & wright a little.’” More was expected for his son at a young age: “‘I also committ’d my Son Thomas into ye charge & Tuition of Mr. Cheny whom I intend shall be his schoolmaster, & now he doth begin to teach him his primer; I intend he shall begin to spell, & Read Latin together with his English, & to learn to speak it, more by practise of speaking yn by rule; he could ye last year, before he was 4 years old, tel1 ye Latin words for the parts of his body & of his cloaths....”

The effectiveness of such home teaching is reflected in three surveys of reading abilities of incoming boys conducted by The Brewer’s Company of London at their school at Aldenham, Hertfordshire in 1689, 1695, and 1708. These showed that “together out of the 127 boys covered, 10 per cent of the incoming 3 and 4-year olds could read, but almost one-third of the 5 year olds and just over half of the 6-year-olds could read.” In this case, these were not children of the wealthy but children of brewery workers. In addition to company schools, many village schools taught by local school dames or by licensed itinerant masters were established across Britain. These used books such as Royal primers (in both hornbook and battledore format) that were commissioned by the monarchy to help spread literacy across all classes.

244 Spufford. “Women Teaching Reading to Poor Children in the Sixteenth and Seventeenth Centuries.” p. 55.
245 Pollock has, through her detailed analysis of hundreds of primary English and American sources, reconstructed “a genuine picture of childhood in the past” which is “a much more humane and optimistic picture than the current stereotype.” From the frontispiece in Pollock, Linda A. Forgotten Children: Parent-Child Relations from 1500 to 1900. Cambridge: Cambridge University Press, 1983.
247 Masters received licenses to teach boys to “write, read and caste an accounts.” Girls were taught to “read, sew, knit and spin.” Spufford. “Women Teaching Reading to Poor Children in the Sixteenth and Seventeenth Centuries.” p. 47.
Literacy was intended to give children the ability to read the bible and other religious and morally uplifting works and thereby encourage them to virtuous action. Works not of religious or highly moral nature were considered suspect and condemned as dangerous to moral health. Publishers however, attempted to give their books validity by encouraging the idea that reading histories was a valuable means through which children gained literacy and thereby gained a greater desire to read more learned materials:

*History ought to be praised, not condemned; for it doth encourage Youth through the pleasantness of the Story, whereby he doth sooner attain to his English Tongue, and is still more desirous to read further. For many thousands at School, in their innocency, are more naturally given to learn first Historical Fables, by which they sooner come to read perfect, then to begin first in hard books appertaining to Divine knowledge.*

Histories became exceedingly popular but the increased literacy that came with reading them did not necessarily lead to an interest in more learned and religious works. John Bunyan, the Puritan preacher and writer of *Pilgrim's Progress* (1628-1688), tells us about his youthful reading and about his flock’s reading habits:

*...give me a ballad, a News-book, George on Horseback [a quarto chivalric romance] or Bevis of Southampton, give me some book that touches curious Arts, that tells of old Fables: but for the Holy Scriptures, I cared not. And as it is with me then, so it is with my brethren now.*

**New approaches in learning... in a manner more pleasant**

John Locke disapproved of the educational methods of the day and advocated a more experimental approach that was considered advanced at that time. Today it is still often only aimed for and not achieved. Locke wrote a series of letters to a friend making suggestions on bringing up his son and in 1693 these letters were published as *Some Thoughts Concerning Education*. Locke believed that the objective of education should be to train children in wisdom and virtue rather than in information. He felt that children should be taught in a manner more pleasant and more suitable to their capacity than the scholasticism of the day allowed. He wrote that they should not

*... be hindered from being children, nor from playing and doing as children.... They love to be busy, change and variety are what they delight in; curiosity is but*
an appetite for knowledge, the instrument nature has provided to remove ignorance. 251

Locke believed that children should be taught to read when they are very young and he associated literacy learning with play. He says,

When he can talk, 'tis time he should begin to learn to read... That great care is to be taken, that it be never made as a business to him, nor he look on it as a task.... I have always had a fancy that learning might be made a play and recreation to children: and that they might be brought to desire to be taught, if it were proposed to them as a thing of honour, credit, delight, and recreation, or as a reward for doing something else; and if they were never chid or corrected for the neglect of it. 252

Believing that reading should be an enjoyable endeavour, he found a dearth of books for children that would engage them. He recommended books such as Reynard the Fox and Aesop's Fables that consisted of both interesting and thoughtful stories and entertaining pictures:

When... he begins to read, some easy pleasant book, suited to his capacity, should be put into his hands, wherein the entertainment that he finds might draw him on, and reward his pains in reading, and yet not such as should fill his head with perfectly useless trumpery, or lay the principles of vice and folly. To this purpose, I think Aesop's Fables the best, which being stories apt to delight and entertain a child, may yet afford useful reflections to a grown man.... 253

Changing views – more suitable language, appropriate pictures

With Locke's educational theories came an increasing belief that children had different needs than did adults in their reading materials. Books could “inflame children’s minds” and pictures could “excite their curiosity and stimulate their attention.” Authors and publishers began to show concern with the manner in which text was written and illustrations conceived in books intended for children so that they would be better received. David Whitley, in Samuel Richardson's Aesop, shows that successive versions of Aesop's Fables published over a hundred years from the mid-seventeenth to the mid-eighteenth century were increasingly directed towards children. Whitley points out that the different authors’ versions of the traditional stories also reflect the changing political and religious philosophies and ideologies of the growing enlightenment of the eighteenth century.

251 Patricia & Gordon Moyles Demers, From Instruction to Delight: An Anthology of Children's Literature to 1850 (Toronto: Oxford University Press, 1982). p. 77.
253 ibid §156
In 1651, John Ogilby, a staunch Royalist, produced a lavishly illustrated and expensive folio edition of these fables in which he gave them a Royalist twist to express solidarity for the nobility who had lost the war. This version, though sharing a topic common to children, is in intent, in cost, and in content, a book for adults. It is followed in 1673 by a less elaborate and more comprehensive version (unknown author) that gives the reader more fables so that: “Men and children may read the same books, but for different ends and purposes.” In the introduction the author provides justification of practices such as using verse above prose that take into consideration children as audience: “firstly, ‘common experience shewing us that it is easier for men (and to be sure for children) to remember metre than prose’ and, secondly, to ‘insinuate grave sense into the minds of young and old with more delight and pleasure.’”

In 1692, Sir Roger L'Estrange, also a Royalist, published a version that was more beautifully told for children. It was large and costly and the literary qualities of the fables were much improved. L'Estrange also brought to his edition a sense of liveliness and fun. He believed that playfulness and wit were important, that otherwise stories about society were too serious and fell flat in the telling. In this he was a harbinger of the entertainment-and-education approach put into effect by publisher John Newbery fifty years later, and of the current attitudes towards entertainment as an important ingredient of engagement and learning within digital environments.

In 1703, a version attributed to Locke, *Aesop’s Fables in English and Latin, interlinearly, for the benefit of those who, not having a master, would learn either of these tongues*, was published. It consisted of text “consciously oriented towards a child readership” and illustrations that were “designed with clarity and simplicity” making them “genuinely” suitable for children.

In 1722 Samuel Croxall published a version in which he counters L'Estrange's political ideology with his own political views and what he considers a return to the “Aesopic” tradition or “the cause of Liberty.” His book, intended for a broader audience, is less lavish, smaller, and more modestly price. It also uses language that Croxall felt was more appropriate for children. Croxall opposes L'Estrange’s philosophy concerning children. L'Estrange saw children as ‘a mere rasa tabula, or blank paper, [they] are ready indifferently for any opinions good or bad; and that it is in the power of the first comer, to write Saint or Devil upon them, which he pleases.” Croxall rebutted hotly with “What sort of children therefore are the blank paper upon which such morality as this ought to be written? Not the children of Britain, I hope; for they are born with

---

free blood in their veins, and suck in Liberty with their very milk... let the minds of our British youth be forever educated and improved in that spirit of Truth and Liberty....”256

In 1740 Samuel Richardson authored *Aesop’s Fables with Instructive Morals and Reflection* particularly with children in mind. Richardson agreed with L’Estrange’s Lockean view of *tabula rasa* and he modified some of L’Estrange’s stories to express milder methods for educating children. In particular he considered the fables from the point of view of the child and includes a sense of playfulness in their retelling. Contrary to the moral teaching of the day he also maintained the sense of curiosity as “a healthy, necessary and essentially innocent quality” in the commentaries which accompany the stories. Richardson felt that illustrations have an “alluring force ...on the minds of children” and that they “excite their curiosity and stimulate their attention.” The illustrations commissioned for his book, though more cluttered than the simple illustrations of Locke’s book, are intended to act not only as mnemonic aids but to represent central features of the narrative.257

An early proponent of using an amusing and entertaining approach was the writer and tutor, Isaac Watt. Watt wrote religious instruction for children in lyrical poetic form using “simple diction, rhymes, and rhythm.” He believed “‘There is great delight in the very learning of truths and duties this way. There is something so amusing and entertaining in rhymes and metre, that will incline children to make this part of their business a diversion.’”258

**Learning tools: narrative artifacts**

A domestic nursery culture had grown out of the oral learning tradition that existed in the home and community. It was a response of families, in particular of mothers, to the literacy needs of the day. Alphabet cards, handmade books, word cards, and other ephemera such as blocks, favourite toys, and family board games constituted the home collections that augmented the battledores and primers of the day with materials which were a useful and enjoyable part of children’s educational experiences. These materials taught not only skills such as literacy but also values, ethics, behaviour, and current events.259

John Newbery was one of a number of publishers putting a public face on the growing body of educational and literary materials being developed for children in the home. The

---

256 Whitley. “Samuel Richardson’s Aesop.” p. 74.
257 Whitley. “Samuel Richardson’s Aesop.” pp. 74-77.
literature available to children at the time was primarily of two kinds: instructional books that taught morals and courtesy and reflected the ethical message of the moment, and the adult books children adopted to read for pleasure. In 1744, influenced by Locke’s approach to a milder and more pleasant approach to education, and taking his cue from The Child’s New Plaything, a spelling book published earlier by Mary Cooper, he published A Little Pretty Pocket Book “to make the Learning to Read a Diversion instead of a Task.” In this children’s book Newbery continued in the tradition of the alphabet book to teach ABCs, rules of life, and morals. To this he added his belief in “Delectando monemus: Instruction with delight.” The following advertisement appeared in the London Penny Advisor on June 18, 1744:

_A LITTLE PRETTY POCKET BOOK, intended for the Instruction and Amusement of little Master Tommy and pretty Miss Polly; with an agreeable Letter to each from Jack the Giant-Killer, as also a Ball and Pin cushion, the Use of which will infallibly make Tommy a good Boy and Polly a good Girl._

Revolutionary at the time, this combination of learning and entertainment merchandise added to the nursery tradition of using ephemeral artifacts to help educate children. These artifacts, rather than presenting text or illustrations directly, were nonessential accessories that rather augmented and extended the range of the story into play activities, reinforcing the theories of pleasurable learning introduced by Locke. Using supplemental artifacts became a standard approach in merchandising children’s books, one that is used extensively today.

Newbery also wrote stories in which he encouraged children to improve their situation in life as he had. He did so with humour but always with truthfulness about the dangers or brutality that life regularly dealt out. His writing told about the process of growing up and reaping the rewards of good habits in becoming responsible and successful adults. He encouraged children to think for themselves and provided examples for how they could attain the qualities of independence and maturity. His most popular book in this vein is _Goody Two-Shoes_. After his death, his rational and enlightened approach became unacceptable. Reformers of the day became fearful of the social and economic aspirations of the lower classes and considered the proliferation of enlightened print dangerous.

---

261 Demers, _From Instruction to Delight: An Anthology of Children’s Literature to 1850._
263 Jackson, _Engines of Instruction, Mischief, and Magic._

86
More stories... easier to purchase...

“Cheap print” such as broadside ballads, broadsides, playing cards, and tracts (pamphlets) had been made possible by the improvements in moveable type in the sixteenth century. In particular the chapbook, or penny dreadful as it came to be known, became exceptionally popular, sold in large quantities, and was a staple of the print trade until the twentieth century. The predecessor of the ubiquitous paperback, it fueled the public’s desire to read. Small, inexpensive, and readily available from itinerant peddlers or booksellers’ stalls, many chapbooks were like today’s illustrated comics but more crudely drawn and reflecting a vulgarity in language that “even before children, was far more outspoken than it is today.”264 Though some chapbooks were religious in nature, they covered every topic possible and had something of interest for everyone: tales of chivalry, accounts of witchcraft, fortune telling, cookbooks, local stories, histories, jest books, fairy tales, lurid accounts of crimes, and bawdy stories. Moral reformists propagandized that there was an “unmanageable excess” of such vulgar material, claimed people were becoming addicted to cheap print, and declared chapbooks dangerous to moral health.265 Thomas DeQuincey, a well-known author of the day, wrote in *Confessions of an Opium Eater* that the cravings he had which were satisfied by books as a child turned to an addiction to opium when he became older.266 These ideas reflected the ideology of their proponents more than they did the nature of the book. Chapbooks gained a reputation for being repositories of “smut, traducers of rationality and promoters of perilous delusions; and... breeders of ugliness and pictorial crudity.”267 They were deemed to undermine the moral and social order of the day and were attacked with vigor.268 No less an influential thinker than Dr. Samuel Johnson (as had John Bunyan a century previously) professed that he bitterly repented being “inordinately fond of reading romances of chivalry [when a youth]” that had proved so popular at his bookseller-father’s stall at the Uttoxeter market.269 Children, women, and the lower classes were seen to be particularly at risk by social reformers of the day.270

A broad selection of stories became available for children to purchase for pennies in the easy-to-access chapbook format. Many collections included *Jack the Giant Killer, The History of the King and the Cobbler, The History of Sir Richard Whittington, Thrice Lord Mayor of London,*

---

265 Jackson, *Engines of Instruction, Mischief, and Magic.*
267 Jackson, *Engines of Instruction, Mischief, and Magic.* p. 67
268 Griscom, *Trends of Anarchy and Hierarchy: Comparing the Cultural Repercussions of Print and Digital Media.*
269 Spufford, “Women Teaching Reading to Poor Children in the Sixteenth and Seventeenth Centuries.” pp. 51-52.
270 Jackson, *Engines of Instruction, Mischief, and Magic.*
The Babes in the Wood, Robin Hood Ballads, and Tom Thumb.\textsuperscript{271} As these stories entertained, they passed on local history and cultural mores. Originally many stories that were printed at this time, such as Robinson Crusoe, were written for adults, but children quickly adopted them and made them their own. Children were becoming a literate audience that would eventually guide the market place with their own needs and demands.

Printed text by this time had become part of the social fabric: posters and pamphlets promoted beheadings, daily papers heralded local, regional, and national news, ballads provided songs to both the balladeer and the crowd, ubiquitous playing-cards taught alphabets, spread political satire, and ridiculed famous people. These narrative artifacts offered the stories of the day in ways that people could share in family kitchens, in pubs, on street corners, and in town squares. They became the medium through which children engaged with the events, ideas, and issues of the day, and through which they encountered their society’s mores.\textsuperscript{272}

Continuing pendulum shifts: from morality to fantasy, from education to entertainment

Towards the end of the eighteenth century the ideas of Jean Jacques Rousseau about education were received in England as inspired philosophy. In his books \textit{Emile} (1762) and \textit{The Social Contract} (1762), Rousseau advocated a radical new approach to development that valued naturalness and innocence and advocated nurturing virtues such as spontaneity and purity rather than the corrupting values of society. This was, however, only for boys. Girls were to be restrained and their will broken to ensure a submissive and decorous attitude in keeping with becoming wives. Boys were to enjoy physical activity and exercise, girls needed to be confined to prevent them from becoming course.\textsuperscript{273} Rousseau’s social contract ideas were considered so radical that he was banished from France and his books were burned in the public squares in Paris and Geneva.\textsuperscript{274} Political conservative reformists such as Sarah Trimmer and Dorothy Kilner used his ideas about natural innocence to bolster their rhetoric that enlightened ideals were dangerous to the existing social order. These were adapted in tracts that described to children their “natural” place in society. The reformists disapproved of trade fiction in the form of chapbooks, and the genre of the novel in particular, as these books often depicted realistic children with independent ideas in imaginative adventures. Reformists saw children as vulnerable to influences which might make them think themselves “unnaturally” above their place in society.

\textsuperscript{271} Meigs, \textit{A Critical History of Children’s Literature}, p. 56.
\textsuperscript{272} Spufford, “Women Teaching Reading to Poor Children in the Sixteenth and Seventeenth Centuries.”
\textsuperscript{273} Jackson, \textit{Engines of Instruction, Mischief, and Magic}.
\textsuperscript{274} This was more because of this social contract ideas than his ideas of education. Demers, \textit{From Instruction to Delight: An Anthology of Children’s Literature to 1850}, Postman, Neil. \textit{Building a Bridge to the 18th Century}. New York: Alfred A. Knopf, 1999. Meigs, \textit{A Critical History of Children’s Literature}, Jackson, \textit{Engines of Instruction, Mischief, and Magic}. 88
The new emphasis by publishers such as Newbery on enjoyable children’s literature had generated a proliferation of books which were whimsical and imaginative, and entertained as well as educated. Considering these unsuitable and a dangerous distraction, the socio-religious reformers set about to change the direction of literature for children and succeeded in giving it a heavy evangelical tone during the last quarter of the century. Using Rousseau’s concepts for their purposes, they wrote and distributed tracts which exalted the primitive state of poverty of the working class – it kept them free, after all, of the contamination of society – and created stories that were clear in their descriptions of class distinctions and of the proper place of children in society. They used books and tracts “to inculcate in the minds of youth the most necessary virtues… by choosing the good and avoiding the evil… with the hopes of a brighter reward hereafter.”

At the same time a rational literature arose that described events suitable to educate, inspire, and uplift the spirit. Led by the writer and educator Anna Barbauld, this included the work of many writers (predominantly but not exclusively female) who produced stories full of useful knowledge for the purpose of developing mature, reasonable adults who in the Lockean spirit would be able to take a measure of control in their lives. The evolving novel provided a new form for stories that could be used to influence children’s behaviour. It was quickly put to use to describe values and morals, to define the conduct and role of children in society, and to encourage children to model this accepted conduct. Many stories, such as Mary Wollstonecraft’s *Original Stories*, were published about boys and girls in challenging situations that they strove to conquer. These brought home messages of right principles and good habits. Wollstonecraft dramatized the qualities normally presented in conduct books. She sought to influence girls away from vanity and selfishness through independent thought: “It is the proper exercise of our reason that makes us in any degree independent.” While providing a moral conduct of propriety, such stories also made females figures of authority and extended their influence outside the home.

Women writers relied on their own experience with children to create age-graded books (*Lessons for Children of Two to Three Years*) based on day-to-day activities in home settings, and dialogues (*Easy Introduction to the Knowledge of Nature*) that went beyond rote learning and used the catechist method of question and answer to teach. These echo earlier interactive

---

275 Demers. *From Instruction to Delight: An Anthology of Children’s Literature to 1850.*
276 Between 1795 and 1798 over two million copies of *Cheap Repository Tracts*, written by Hannah More, to replace subversive chapbooks and tracts, were sold at ½ to 1 ½ pencé to the poor. Jackson, *Engines of Instruction, Mischief, and Magic.*
approaches to literacy and learning, such as those suggested by Tryon in 1699, and as used by
Aelfric in his *Colloquy*. Visual materials were considered important in reinforcing truths. Many
biblical and historical prints with accompanying notes were created for nursery walls.279

Intellectual women, engaged in the politics and education of the day, threatened the male
establishment who proceeded to denigrate female rationality and its accompanying instructing,
moralizing, and preaching literature as "dry, inhuman, and dreary." In particular, the male literati
of the day, concerned with the success of their female counterparts, encouraged a feminine
infantilism in their writing and a continuation of the romantic myth of the child. Wordsworth,
Coleridge, and Lamb were among those who promoted the idea that fantasy, with its fairies,
ever, ogres and giants is where: "all that is human" resides.280 They rationalized that "much
good advice and information can be conveyed in a Fable and a Fairy Tale" which are, in their
way, as amusing and 'improving as an account of Sir Isaac Newton's Philosophy, or an
Abridgement of Locke on the Human Understanding."281

This strong reaction had two effects. It succeeded in undermining an entire generation of
progressive approaches to children’s, and particularly girl’s, intellectual independence. It also
stimulated a renewed interest in the fairy tales, myths, and romances of earlier times that
translated into exciting new developments in works of nonsense and fantasy.

One of the most important of the new books that resulted from this interest was
S.C. Martin's *Comic Adventures of Old Mother Hubbard and her Dog*. *Mother Hubbard* was a
stock figure out of old nursery tales. This new version was an instant success, was much
imitated, and was recited and sung by children for decades afterwards, even to today. Comic
amusement, particularly in poetic form, replaced the earnestness of the rationalists and "for the
first time in children’s literature many little works successfully combined learning and
laughter."282 Mother Hubbard opened the floodgates to a tide of engaging and enjoyable poetry
that led to works of complete nonsense (*The Book of Nonsense*, Edward Lear 1846) and
eventually fantasy. By the time the significant work of fantasy *Alice in Wonderland* was written
by Lewis Carroll (1865), moral preaching and educating were no longer considered necessary in
children’s books.

281 This provocative statement appears in the dedication to Elizabeth Newbery’s *Oriental Tales* which was reissued by the publisher
The Victorian era was a time of large families who read together and many children’s books were written to be shared by a wide audience of different ages. Authors such as Charlotte Yonge captured the detail of the self-contained and self-sufficient daily life of the family, so different from that of today, in the conversations and characterization of stories such as *Langley School*. A story about a school started for uneducated neglected children, it is said to have “fired the imagination of girls in their teens and set a whole generation to school-teaching.” This was also the time when, in addition to the books families read together, magazines and annuals (discussed later) brought a wide range of materials for children which broadened the scope of their reading. Margaret Gatty, as editor of *Aunt Judy’s Magazine*, introduced children to Hans Christian Anderson, Lewis Carroll, Charles Kingsley (*The Water Babies*), and poets such as C.S. Calverley, through one monthly avenue.

Progressive attitudes tried to eliminate the mystery of the world with scientific fact in the late nineteenth century and changes in the ideology of the time were reflected in the contents of printed texts. Unlike the religious thinking which considered curiosity unhealthy and had predominated until then, the new secular approaches to knowledge viewed curiosity as positive and healthy. The texts that explored scientific ideas, mechanization and mass production, and religious changes became socially influential affecting adults and children alike. “On the one hand there are the radical developments in the form, content and volume of the printed word which was read to or by children. On the other there are the children themselves, making and remaking their identities through contact with a variety of shaping forces, amongst which books and the skills required to decode them were becoming increasingly important.”

It was, however, difficult to provide guidelines for ethics without some type of preaching or example. In the absence of religious faith, and with the renewed interest in the fable and fairytales, writers again turned to the fairies, talking animals, and other magical beings such as had been present in oral folktales of long before, to provide comfort against the unknown. George MacDonald’s *The Princess and the Goblin* provides children with an alternative world in which to explore spiritual concepts. Other authors such as Kenneth Grahame chose to present the norms of cultural behaviour within their society through novels they wrote for children. C.S. Lewis says of Grahame’s *The Wind in the Willows*, “The child who has once met Mr. Badger has

284 Whitley, “Samuel Richardson’s Aesop.” *Jackson. Engines of Instruction, Mischief, and Magic*.
got ever afterwards in its bones, a knowledge of humanity and English social history which it
certainly couldn’t get from any abstraction.286

In 1883, Robert Louis Stevenson published *Treasure Island* which became the epitome of
the new genre of action-filled adventure. *Treasure Island* espoused Stevenson’s beliefs of what
constituted good narrative for children: stories should “absorb and delight [the reader], fill their
minds with a kaleidoscope of images, and satisfy their nameless longings.”287 He felt that two
factors attract children to a narrative. The first is incident and the second selectivity. Children
are first interested in the a-moral incident, that is not in why a person would do something but in
how he/she manages to do it, not in the conscience but in the “problems of the body and of the
practical intelligence, in clean, open-air adventure.” To maintain this interest however, the
narrative must have incidents that are “‘fit and striking.... The right kind of thing should fall out
in the right kind of place; the right kind of thing should follow.”288 “The right kind of thing” can
be seen as a familiar set of actions or a schema. Stevenson understood children like action in a
story and need a schema as a reference to help them engage easily with a story.

Aware that images helped to immerse children in their stories, authors began to work more
closely with illustrators to become partners in telling the story. Edward Lear’s illustrations added
their own comic element to his ditties in *The Book of Nonsense.* Carroll specifically chose Tenniel
and his ironic style to present Alice to the world. Towards the end of the nineteenth century,
there were improvements in color printing and photoengraving. Artists’ work was no longer at
the mercy of the interpretation of an engraver. Children’s books benefited from illustrations of
artists such as Randolph Caldecott, whose work provided stories with humor, energy, and a sense
of movement.289

As Stevenson had brought adventure and action to children’s text, Howard Pyle brought
adventure and action to children’s illustration. As an artist, Pyle sought to create a greater role
for illustration in the life of the story. Until his time illustrations were like stage sets, central to
the story but apart from the reader. Pyle dramatized the themes of books in his pictures to make
readers feel they were at the center of the action he visualized for them. Researching his topic
exhaustively and developing his compositions so that every detail contributed to the story, he
strove to bring the intention of the text to readers by drawing them into the picture and making

289 Cullinan. *Literature and the Child.*
them feel a part of it. His illustrations are “storied pictures”: “First of all they tell a story and
tell some phase of it better than written words do.” They are “not merely decoration, but
objectification of thought and feeling.”290 In this Pyle achieved what Richardson had attempted
to do with illustrations in his *Aesop’s Fables* for children more than a hundred years previously.
His work presaged the approach of picture books. Stories for children now consisted not only of
text that was engaging, but also of visuals which reinforced this engagement.

Harvey Darton tells us in *Children’s Books in England* that at the turn of the century
Edwardians welcomed every “shade of Free Thought for Infant Minds” in children’s literature.
This resulted in an exceptional blossoming of stories for children – a Golden Age of Children’s
Literature.291 Like the fairytales of Perrault, the Brothers Grimm, and Hans Christian Anderson,
narratives from this era survived the decades, become mainstays in print literature (as well as in
movies and television), and influence children even today with their vision of the world: *Hans
Brinker and the Silver Skates* (1865), *Little Women* (1867), *Twenty Thousand Leagues Under the
Sea* (1869), *At The Back of the North Wind* (1871), *The Adventures of Tom Sawyer* (1876), *The
Merry Adventures of Robin Hood* (1883), *Heidi* (1884), *Pinocchio* (1891), *The Jungle Book*
(1894), *The Wizard of Oz* (1900), *The Tale of Peter Rabbit* (1901), *Peter Pan* (1904), *Anne of

This exceptional blossoming of children’s stories at the turn of the century became lasting;
children’s literature grew and matured. The most important development in the first half of the
twentieth century in children’s books was the development of the color printing process of photo­
offset lithography in the 1930s that made book illustration practical and inexpensive. The picture
book encouraged the use of visuals as a narrative medium. It required both a new alliance
between writer and artist and the development of a new visual literacy for children. Illustrations
that once supported or extended a writer’s text were equal partners in telling stories. The new
opportunities for juxtaposition of text and image made for a new type of narrative, one that laid a
strong foundation for the visual literacy necessary for the development of digital media. Old
favorites were remediated and revivified in this new form and the picture book quickly evolved
into a very popular genre. Movableks also enjoyed a resurgence. Awards such as the Newbery
Medal (1922, U.S.) for excellence in children’s literature and the Caldecott Medal (1938, U.S.)
for excellence in picture books were established to recognize quality of both text and illustration.

290 Meigs, *A Critical History of Children’s Literature*. p. 279. Howard Pyle (1853-1911) was a very popular illustrator and numerous
sites are devoted to his work. More information as well as samples of his illustrations can be found at the Bulletin of the Center for
Children’s Books: http://alexia.lis.uiuc.edu/puboff/bccb/050gone.html. A particularly engaging site can be found at
In the 1950s – 1960s, there re-emerged an absorption with narrative as an educational tool. This echoed the approach to purposive narratives of the sixteenth to the eighteenth century. The Soviet Union’s launch of Sputnik in late 1950s galvanized the U.S. to a greater interest in the sciences and an improvement in their educational system. The idea of “children’s literature as an art form” that had been growing steadily from the mid-nineteenth century was pushed aside by the resulting obsession with informational and educational books.

Though there were fewer stories that provided good writing, good drawing, and genuine humor about the world, a number of modern classics emerged from this time: among others, E.B. White’s *Charlotte’s Web*, and Jean C.George’s *My Side of the Mountain* in the U.S. and C.S.Lewis’s *Narnia* series and Mary Norton’s *The Borrowers* series in England. Then in 1965, The Head Start Program, a major initiative of the U.S. Government, began to encourage a “whole language” approach to education. Its programs validated the importance of a child’s cultural environment in their educational development, and opened the door for the resurgence of the use of children’s imaginative narratives in schools and other educational settings.  

By the late 1960s inexpensive paperback editions of children’s books were widely available and children were encouraged to form their own libraries through book clubs and book fair events in schools. Large publishers such as Scholastic created a demand for more children’s stories. When a mountain of literature arises there is a susceptibility for the stories to become market-driven. This process changes the tenor of the narrative since, as Ruth Hill Viguers says in *A Critical History of Children’s Literature*, “The trend to encourage authors to meet specific needs has sometimes discouraged the authors writing out of their own deep incentives.” Stories written to extend a series or used to ply math and science principles may indeed either entertain or educate, but they do not necessarily satisfy children’s affective needs or help them understand their place in the world. This susceptibility is not specific to print but can be seen in all communication media.

**Schools and libraries: new influences**

At the beginning of the twentieth century, what a child read was often defined by school authorities. The secular public school in England had its beginnings with the factory acts of the mid-nineteenth century that had sought to impose restriction on child labour. The Industrial

---


Revolution had created a need for a concentrated workforce, and between 1760 and 1860 half of Britain’s rural working population had moved to cities. Within the working classes, this move altered the dynamics of the family and the community by making work rather than the family unit the center of social meaning. Working parents could spend little time minding their children who were, in any event, expected to work however young they might be. Employers took advantage of families’ needs by employing even the youngest children for a pittance. Authorities instituted workhouse and church schools in order to (among other reasons) elevate children from the “filthiness and abomination of their own homes” and to exert social control over them through the curriculum and structure of school environments. The Elementary Education Act of 1880 made school mandatory for children ages five to ten. As the mandatory age was raised (to 11 in 1893 and 12 in 1899), schools increasingly became a source of authority in children’s lives.\(^\text{294}\) A day in the life of a child that would have at one time reflected the personal schedule and agenda of family and community working in concert, now reflected a political and educational structure that served the need to order work of society at large. As children were constructing meaning for themselves out of the society around them, they were being influenced more directly by authorities through intervention in the workplace or the school. Information about the world was no longer being sifted only through the family unit. What was taught in schools was in the hands of a few individuals who were not necessarily of a child’s family, of their community, or of their immediate social structure. Instructional materials such as the King’s Primers were used to provide consistency in teaching religious and moral precepts to children. This new source of authority established a presence in their world and became instrumental in developing their worldview.\(^\text{295}\)

A second influence that defined what children read was the public library. Children’s libraries emerged once children could no longer be ignored because of the increased number that accessed the public system. Libraries had been established in schools as early as 1660 (Britain) and in subscribed collections in municipalities as early as 1803 (U.S.). Associations such as the Sunday School movement in Britain and the American Sunday School Union instituted libraries, became a source for children’s books, and influenced the tone and content of books throughout the nineteenth century. Between 1885 and 1900 public libraries across the U.S. opened children’s rooms and librarians began to institute programs to reach children, not only through the libraries


\(^\text{295}\) Thurston, *Primers for Children*. 

95
but through schools and homes as well. At the turn of the century educational classes became available to train librarians in the organization of children’s books. These classes educated them to be able to define quality and distinguish the great books amongst the increasing numbers of children’s stories available. It also taught them to plan programs during which stories were read and children’s creative writing and illustration encouraged. \(^\text{296}\) Children had free access to a wide range of print materials, and could attend organized narrative events in an environment that was more egalitarian and less restrictive than either home, school, or church. Such venues opened up opportunities for choice and interpretation which did not exist before.

**Aggregate media: magazines**

Two additional types of print narrative require attention before we move on to new media: children’s magazines and their compilation, the annual, and moveables, children’s literature that included more than printed text. Both these presage today’s websites for children. The *Lilliputian Magazine*, the first of its kind, was an invention of John Newbery. In it he intended to “Amend the World, to render the Society of Man more Amiable, & and to establish the Plainness, Simplicity, Virtue & Wisdom of the Golden Age.” \(^\text{297}\) His audience was new and had not yet formed consistent reading habits, which resulted in the *Lilliputian* only surviving three issues. It was then issued as a book in 1752, and appeared regularly for thirty years. *Lilliputian* set the scene for later magazines and annuals. A compilation of short fables, tales, and histories, each issue introduced stories and characters which later were extended into novels for children. It also included jokes, riddles, games, and subtle advertising of other Newbery stories. Harvey Darton writing in 1932 provides us with the typical contents:

*The contents are various enough for any modern magazine. They include a sort of juvenile Androcles lion tale; an adventure of children among thieves; an adult (or nearly) “History of Florella”; an account of the rise of learning in Lilliput; an anti-cockfighting letter: “jests” (thin but more decent than those in the chapbooks); a song with music, by “Polly Newbery”; some riddles; the Adventures of Tommy Trip and his Dog Jouler”... and a list of young subscribers, who include, among others, Isaac Hawkins Browne (then aged about six....).*

The diversity of these early magazines/annuals continued to be used as a successful formula for twentieth century children’s weekly periodicals and the modern magazines of Darton’s era, such as *Chums*. A 1924 weekly issue of *Chums* contained, among other things, a full-color double-page spread of locomotives, letters to and from the editor, three chapters of the


serial *The Captives of El Dorado* (action-packed with searches for gold, captures and escapes, and fights galore), prize jokes, an article with hints for young soccer players, a true story of searovers, *Pirates in Real Life*, a second serial *The Deathless Dynasty* (more action-packed adventure), a nature story about hibernation, yet another action packed story, *Yellow Diamonds*, this time complete, that boasts *An Aeroplane Disaster – Meeting Da Castro – Wild Days of Adventure*, another nature information piece, this one on birds, and finally, instructions for making a model twin helicopter, illustrated in black and white.298

This style of book, with its short and long stories, both factual and fictitious, and either informational or instructional, presents a diversity of content intended to inform and amuse children. No longer a popular genre today, it provided in print form the diversity of content now presented in children’s websites.

**Manipulating story: movables**

Movables, used as early as the thirteenth century,299 became popular for children at the end of the eighteenth century. “Metamorphoses” Harlequinades, which were lift-the-flap-style books, first appeared about 1765. Displaying a sequence of scenes, they transformed quickly through a series of folded and hinged pages to new images. Children, and adults with whom they were equally popular, could “direct and participate in the movements of the book by hand” and made meaning of the book through this “tactile” experience.300 These scenes foreshadowed interactive media by providing readers opportunities to directly effect changes to the story. Figure 5.4 shows a movable with flaps that lift to reveal a change in story.

**Figure 5.4. Queen Mab or The Tricks of Harlequin** 301

---

These were followed in 1821 by the lift-the-flap technique of *The Toilet*. The first of its kind, this book showed scenes of a girl’s dressing table that held a number of toilet items. These lifted up to reveal text accompanied by scenes depicting specific virtues: “‘rouge superior’ equals modesty, ‘best white paint,’ innocence, and a looking glass, ‘Humility.’” A boy’s version that depicted pieces of armor instead of toilet articles soon followed. Lift-the-flap books offer access into the contents of the book directly through physical action by the child. They provide children with “metaphors to handle ideas and make them more concrete.”

Dean Thomas, who published from 1800, devoted his business entirely to publishing novelty books from the 1840s. His “toy” books, as they came to be known, dominated the movable book marketplace until the 1880s. He created movable scenes for the traditional fairy tales of *Cinderella*, *Beauty and the Beast*, and *Sleeping Beauty* and many others. Children could engage with the characters and the events of their favorite stories in a more sensory way, “integrating materiality with imagination.” These “toy” books necessitated a physical involvement between the reader and a material presence that represents the text; this tangible interactivity with the book’s contents makes the experience more memorable.

**Figure 5.5. Dean Thomas’ “toy” books**
Dean Thomas’ advertised book list and “toy” book *Beauty and the Beast*.

Another facet of tangibles associated with books was the paper doll that publishers started producing in the late 1790s. Books such as *Little Fanny* came with paper dolls and outfits for the different episodes in the story. In these first iterations, the doll’s head alone moves to acquire differently dressed bodies. Fanny, an idle girl eventually learns through a series of episodes that it is better to read books than play with dolls. Children could change Fanny’s outfits and playact

---

303 Hoyenski, *A Brief History of Early Movable Books*.
305 Ibid. p. 359.
her progression through the consequences of her actions in the individual episodes. In their
playacting, they could either pretend to be Fanny or simply manipulate her.

**Figure 5.6. The History of Little Fanny**
Little Fanny’s head moved through a number of different scenarios.

Changing fortunes during WWI meant that the production of movables which were time-intensive to make, and therefore expensive, all but stopped. They did not appear again as an important genre in publishing until the 1930s with the invention of the less expensive process of lithography. At that time not only movables, but paper dolls, lift-the-flap books, and pop-up books came into common use. Figure 5.7 shows a pop-up book from the 1930s and a contemporary Winnie-the-Pooh pop-up book with objects and characters to play with.

**Figure 5.7. Little Red Riding Hood and Winnie the Pooh**
A pop up book from the 1930s and a contemporary pop-up scene and book

**Narrative artifacts**

The concept of learning by doing has today been translated into an extensive range of text-associated materials that are produced by publishers for young children. Children’s narratives come in many sizes, shapes, and formats that encourage an interactive approach to story. They make use of text, photos, illustrations, holographs, 3-d shapes, and sounds. They range in size from one inch by one inch, to twelve inches by eighteen inches, and larger. They are made of paper, board, plastic, or cloth. They have features such as lift the flap, lift the page, and peek through holes. They have simple pullouts and pop-ups or elaborate 3-dimensional scenes. They
incorporate horns that beep, ducks that quack, or characters that sing entire songs at the push of a button. They are accessorized with crayons, scissors, and stickers in order to be colored, cutout, and stickered. They are accompanied by audiotapes, which tell stories whilst pages are turned (ding... turn the page) as well as by stuffed toys that represent the characters in the story. The term “storybook” does not convey the nature of these materials, “narrative artifact” is more descriptive and perhaps more apt.

Though many of these artifacts use simple physical dynamics, such as lift-the-flaps or holes that show part of the picture on the next page, authors have become more exploratory in their use of multiple modalities in their presentation. Janet and Allan Ahlberg created the interactive children’s book *The Jolly Postman, or Other People’s Letters* in the mid 1980s. This book achieved a new level of interactivity in the use of multimodal elements to tell a story. Each facing page contains an envelope of letters, puzzles, or games that children can take out and can read or play with. The authors present the story through the text on the book’s pages and encourage interactivity through activities that include reading letters and playing games. Though the storyline is linear, readers can go back and forth in the book and open the letters in any order, or not open them at all. The story is enhanced by the contents of the letters and games, but is not diminished if these are not used.\(^{308}\)

Movables and artifacts necessitate a physical involvement between the reader and a material presence that represents the text. Both Locke, and Newbery after him, viewed this direct experience of the story as the best way for children to gain knowledge. While texts and pictures provide visual evidence, the narrative object itself provides a tangible connection with the book’s contents that makes the experience more memorable. Contemporary educators such as Piaget and Papert build on these early ideas with constructivist theories that believe children gain knowledge by doing. **Changing media**

New technologies which would have an impact on narrative began to emerge from the late nineteenth century onwards: the telephone, photography, film, radio, television, video, and finally digital media each took the stage in turn. The new mix of media added to ways in which children interacted with narrative. Stories from books were used by these new media, in much the same ways as oral stories supplied grist for the new print trade when it appeared. Before we address the newest technology, digital, in Chapter Six, the last section of this chapter will focus on the

characteristics of children's narrative experience as we can tease them out of our history of the development of children's print. Fundamental to this narrative experience is literacy learning, and the characteristics of one can be seen to be the characteristics of the other.

5.3. Narrative Literacy: Learning to Read

Though children's introduction to narrative begins before they learn to read through the stories they hear sitting on a parent's lap, in a short time they are turning pages for themselves and working out letters and word shapes. As narrative requires literacy, it shares its history with pre-reading strategies, and the activities these consist of are a part of the narrative experience until children are in their early elementary school years, approximately ages five to seven.\footnote{Pre-reading strategies are all of the activities adults encourage children to engage with to familiarize them with text and stories and teach them to read. Since the early history of print, educators have provided advice on methods of teaching to go along with the ABC's and primers that were the first books intended for children.}

John Locke in \textit{Some Thoughts Concerning Education} (1693), and Thomas Tryon in \textit{Law and Orders proper for Women to observe} (1700), provide us with some of the first written suggestions for literacy strategies. Locke's ideas on making learning a pleasurable activity were discussed earlier in this chapter. In his literacy strategies Locke associated material artifacts with texts and suggests the use of educational toys, such as letter dice, as part of a child's playful learning activities. He says,

\begin{quote}
... contrivances might be made to teach children to read, whilst they thought they were only playing. For example, what if an ivory-ball were made like that of the royal-oak lottery, with thirty two sides, or one rather of twenty four or twenty five sides; and upon several of those sides pasted on an A, upon several others B, on other C....\footnote{Locke, \textit{Some Thoughts Concerning Education}. §150}
\end{quote}

Locke sees reading as an imaginative process that proceeds from a child's familiarity with the world around them, linking for instance, shapes with which they are not familiar to things which they already know. In linking text to children's playthings Locke "stresses the intimacy between mental operations and material artifacts."\footnote{Amanda Griscom, \textit{Trends of Anarchy and Hierarchy: Comparing the Cultural Repercussions of Print and Digital Media}, 1998, Brown University, Available: http://www.cyberartsweb.org/cpace/misc/intro.html, 9 September 2005. p. 352.} Parents provided artifacts such as alphabet cards showing letters shaped by the human form, and carved alphabets that familiarized children with the shapes of letters as they learned their meaning.\footnote{Cynthia Burlingham, \textit{Picturing Childhood} (Los Angeles: University of California, 1997).} See Figure 5.8.
Tryon, who did not learn to read until his teens but then became “addicted to Reading and Study,” encouraged mothers in his treatise “Laws and Orders proper for Women to observe” to introduce their children to text from a very young age and in a pleasurable way by frequently repeating and showing them letters and words and by associating the letters and words with the familiar things within the home:

At a Year and a Half or Two Years Old, shew them their Letters, not troubling them in the vulgar way with asking them what is this Letter, or that Word; but instead thereof, make frequent Repetitions in their hearing, putting the Letters in their Sight. And thus, in a little time, they will easily and familiarly learn to distinguish the Twenty Four Letters, all one as they do the Utensils, Goods, and Furniture of the House, by hearing the Family name them. At the same time teach your Children to hold the Pen, and guide their Hand: and by this method, your Children, un-accountably to themselves, will attain to Read and Write at Three, Four, or Five years old.

Tryon’s writings “seem to have had considerable influence” and introduced a less pedantic and more pleasurable and physical approach to learning to read that also saw context as important. Together with Locke’s theories they influenced the use of literacy activities in the home and inspired a nursery culture.

The handmade teaching materials of Jane Johnson (circa 1744) provide an example of the ephemeral objects mothers made to teach their children how to read. Johnson made alphabet and word cards, crib mobiles, and wrote stories about current daily political and social events to

---

313 Courtesy University of California Collections, 1550-1990, Regents of the University of California.
317 Opening the Nursery Door: Reading, Writing and Childhood 1600-1900, ed. Mary Hilton, Morag Styles and Victor Watson (London: Routledge, 1997). Jane Johnson’s of homemade artifacts collection (Elisabeth Ball Collection, Lilly Library, Indiana University) was discovered wrapped in newspapers on a closet shelf in an old home in Indiana in 1982. By revealing the importance of the nursery culture and the family domain this collection of 438 pieces of ephemera changed scholar’s view of how literacy was achieved prior to school attendance in the nineteenth century in England.
use as her teaching tool set for her two children. Jane herself had been raised with handmade card sets and books. She and her sister had played alphabet games, performed plays, cut out paper, painted, and sang songs in connection with the stories they told. Jane drew on her everyday environment and on current events for the content of the texts she used in making cards and writing her stories. Jane taught literacy through parent involvement. She used familiar artifacts, and engaged her children in a variety of play activities. In addition she created her own narrative artifacts, that is, things that were associated with stories but were not necessarily books.

Figure 5.9. Hand-made alphabet cards from The Jane Johnson Collection

Anna Barbauld’s *Lessons for Children* (1778-1779) provided parents with age-graded texts for teaching literacy. These books presented easy-to-read stories of the things that happened within the home and provided the familiar context for learning recommended by Tryon earlier in the century.

By the beginning of the nineteenth century there were games to teach every kind of children’s literature and all curriculum subjects. Table games and puzzles were based on stories, fairy tales, and poems of the day, and there were games to teach everything from geography to morals. Since that time, “combining learning with play [has become] a canonical pedagogical tenet.”

In the second half of the twentieth century, an increased interest in children’s earliest reading and writing experiences resulted in studies that identified factors in the emerging literacy of young children which echoed the approaches of an earlier day. Research in literacy found the quality of pre-school and daycare experiences and the role the parents played in their children’s literacy interactions prior to entering kindergarten affected children’s ability to develop their reading knowledge and skills. Strategies were developed by organizations such as the *National

---

318 Courtesy Elizabeth Ball Collection, Lilly Library, Indiana University at Bloomington.
319 Shefrin, ""Make It a Pleasure and Not a Task" Educational Games for Children in Georgian England."
Association for the Education of Young Children in the U.S. and Child and Family in Canada which sought to improve literacy activities of young children in anticipation that this would make a difference in achievement in later life. Such literacy programs encourage parents to engage children in the narrative process by reading aloud to them, in some cases, from infancy. The province of New Brunswick, for instance, provides all new mothers with a Born to Read kit. This includes a letter to parents on the importance of reading to their children, the pamphlet Catch‘em in the Cradle, and four books to encourage the practice of reading out loud to their children. Books include easy-to-handle board books and peek-a-boo books that encourage interaction.

Contemporary literacy programs identify the language skills of children six months to six years. These range from infants’ ability to recognize familiar voices and sounds, to five and six year olds’ ability to recognize and read simple words. Suggestions for literacy activities for these age groups range from reading aloud to making storybooks. These activities are recommended because they have been found to benefit the development of literacy skills in different ways: cloth, plastic, and board books that allow infants to touch and taste the books develops familiarity with book as artifact, telling stories and making storybooks help children identify story components, pretend play stimulates the imagination, singing songs and doing finger plays stimulate an awareness of the rhythm and sounds of language.

As we can see, today’s recommendations for nurturing literacy and language skills go beyond reading storybooks: they encourage many different activities through which young children encounter narrative. These encounters are based more in the experience of narrative than in any one particular structure of story.

Summary of narrative practices

The following list of narrative practices is derived from both the history of narrative and contemporary literacy programs.


IODE, Born to Read.

In comparison, in the seventeenth century Mr. Slingby expected his son to be reading both Latin and English at four years old. Linda A. Pollock, Forgotten Children: Parent-Child Relations from 1500 to 1900 (Cambridge: Cambridge University Press, 1983).

IODE, Born to Read; Nord, Home Literacy Activities and Signs of Children’s Emerging Literacy, 1993 and 1999.

• listening, looking, reciting
• rhyming, singing
• holding, feeling, tasting, smelling the text artifact
• manipulating the text artifact such as lifting flaps or pop-ups
• clapping, fingerplay, and story actions
• playing with a range of narrative artifacts such as dolls, trains, blocks
• playacting with doll houses, farms, and other environments such as zoos
• painting, drawing, cutting and gluing, sculpting (creative/artistic play)
• playacting or dancing (performance play)
• interacting socially with parents or caregivers
• interacting socially with peers

This list of practices is used as the point of departure from which to look at the narrative experience of young children today. The study, *The dynamic of young children’s emerging narrative process* was planned to observe children for two reasons: first, to determine the set of practices that help define their narrative experience as they moved from an informal (preschool) to a formal (kindergarten) setting; second, to determine if a shift from story as experience to story as structure exists during these years. The study findings provide a set of characteristics against which to juxtapose narrative game characteristics and evidence for a difference in narrative view between young children and adults.

5.4. Current Observations

I conducted the study *The dynamic of young children’s emerging narrative process* over three months from November 2005 to January 2006. This study consisted of participant observations of two groups of boys and girls, the first a preschool group ages three and four and the second a kindergarten group ages five and six. These observations showed that both groups enjoyed literacy activities such as those used historically. They found that the pre-school scenario exhibits an approach that engages children in the story experience as an interpretation of life through various languages such as oral storytelling, writing, art, and song. The kindergarten exhibits an approach to story that aims at introducing the structure of the story to children, introducing them to sequence, character, and setting, and uses stories as a model for behaviour. Details of the research methodology are available in Chapter Two and descriptions of the venues can be found in Appendix E1 and E2. Following are descriptions of activities and examples of daily notes from both observations that show the change in approach from experience to structure.
Preschool

In the preschool, story is presented and discussed as a way for the children to express their ideas through writing, music, and arts and crafts, and the children have opportunities to experience story by participating in all of these activities. Children are encouraged to think about where stories come from, and who wrote them, and to think up stories and make books to share. They are encouraged to participate in making stories together. These come from the children’s own experience but are often fantastical. The teacher writes these stories down and then reads them back. She also makes them into songs. Children are also encouraged to create (write, draw, make) stories at home and to bring these in to share. Print stories are used to support weekly program themes that are based on cultural or seasonal events. Art and craft activities are used to augment the story, sometimes highlighting moments in the story, sometimes following a general theme (snowflakes for a winter story). Art, craft, song, dance, and playacting activities based on stories are initiated by both teachers and children themselves. Both free time and quiet time after snack are available for children to read stories on their own, but most often they share books with friends.

The teacher interviews identified that reading books was a very important part of the curriculum they had developed (five on a scale of one to five), but that it was also important that these stories be age appropriate. Teachers saw children were interested in books with pictures, in repetition, and in a sense of suspense or anticipation, but felt that presentation, such as an animated voice, had much to do with the enthusiasm with which children responded to the story. In particular, children loved the flap stories because they could participate in the story physically. Again, depending on the presentation, these type of stories would likely still be of interest without the flaps. The teachers liked books with a message, that were funny or silly, that had “great rhyming – lovely words,” and that included a sense of anticipation, as the children responded well to these. The teachers used stories to introduce concepts as a catalyst for other activities. They felt the children’s interest in the story was dependent on whether they were tired or not, whether they were distracted by friends sitting close by, and whether they could see the pictures well. They thought that the children usually wanted to hear the end of the story. They heard children using language from their stories when they made up their own songs or puppet shows. They found that children do access the books in the class library during free time, when they read both alone and together with friends.
Throughout a week, stories are an integral part of almost all the classroom activities and, within the routine of these activities, different aspects of a story experience unfold. Following are two examples that show children enjoying story as experience: the first shows the children being encouraged to think about themselves as story creators and stories as being made in a number of different languages: spoken, written, sung. It includes both summaries of and excerpts from the observation notes. The second shows how the story Peter and the Wolf is used in conjunction with a number of different activities and is a summary of notes:

Example 1
[Day 1]
During activity time Heather and Alexis, the two preschool teachers, often encourage discussion about story by inviting comments and questions. On this day, after asking for suggestions about where stories come from, Heather leads the discussion to the topic of people making stories up out of their heads and children having the ability to make stories for themselves. (The following are excerpts from the observation notes)

“Where do stories come from?” asks Heather.
“Paper… libraries…pencil…humans…TV…books,” are some of the answers she receives.
“If stories come from humans how do they come from them?”
“Brain… fun… imagination,” the children pipe up with ideas about where stories might initiate.
Kyle offers a story about his grandfather. “My grandfather lives in Vancouver. He’s an artist, he mainly draws.”
Heather tells a story she makes up as she goes along. “Once upon a time there was a giant with a giant cornfield. Corn grew larger than the giant. He picked three cobs of corn that were huge and took them home. Do you know who was at this home? The crow and the ant. [More details are added]. That story is out of my head. You can make up stories too.”

Heather has a number of items on the desk next to her and referring to them she asks her next question, “Where does music come from? Which of these makes music?” She asks these questions as she shows the children a shaker, a stone, a bottle part-filled with sand. She then blows across the top of another bottle filled with water. She pours out some of the water which lowers the sound. “Sounds like a ferry horn” she says. Heather comments that Halle, who has just remarked that she has a shell that makes sounds, has the beginnings of a good story.

[Day 2]
“Do you remember we talked about stories yesterday? Where do they come from?” asks Heather.
“Writer,” one of the children replies.
“Where do writers get their ideas from?” asks Heather.
“TV, Africa,” are the replies.
“What do you think you would be writing about if you were a writer?”
“‘You would write about some good animals.’ “You would write on a stone.”
Heather tells a story about Africa and about pink flamingos. “I can turn this story into a song,” and she sings her story about pink flamingos in a song voice. She points out that there are high notes and low notes in that song and talks about how a musical language was invented so that people could write songs. She shows the children musical notes: whole note, half note, quarter note and eighth note and talks about how they can be high, low, fast or slow and how they sit on a staff. She says that the children will be writing their own musical stories on a staff. The staff is very large and will be put up on the wall. This will be their planned art activity during free time.

[Day 5]
The children regularly bring in stories which they have written (with their parents) and today Eric has brought one in. “We have been talking about stories. We’re going to read a “Haunted House” story. Eric made it up, his mom wrote it, and he made the book.” After reading it once Heather makes it into a musical story and sings it.

[Day 6]
Today [Heather] continues with her discussion about stories from yesterday, “stories come from our imagination and from our experience... sometimes before pencils and pens, people would sit in a circle and tell stories... that’s a way to tell a story, to share information.” “Eric made up a story and it was great, wasn’t it everyone?” “And now Sophie has made up a story.” Heather reads Sophie’s story. “Did your mommy help you with the pictures? You are an illustrator and an author.”

[Later in the day]
Today Heather tells the children that they are going to write a story. “I’ve already written a story,” says Kyle “This will be a class story,” replies Heather. She wants the children to each add to the story. “I went...” “to the beach...” “all my mom’s family and me...” “What did you see at the beach?” prompts Heather. “I saw a fish.” “Halle, what was the fish like?” “It was a small blue fish.” “What was the fish doing?”

The story grows through questions Heather asks, “Where did they live? What did they do next?” She writes the story down as new additions are made and when it is complete she reads it out loud. The next day during Circle Time 328 she takes out a bag of instruments and distributes them to the children so that each one has a drum, a bell, maracas, or another instrument that is available. “Shall we read our story to the music,” she asks, and directs each small group of children with the same instrument to begin. “I took a picture...” reads Heather to the sound of bells and lots of noise.

328 Addendum E.1 provides information about the class setting, including the schedule of activities.
[Day 7]

“Tous le monde,” Heather addresses the children, “We were writing a story, remember, it was about my family. My family went down to the beach. What a story you made, what a good story. Should we make an end to the story?”

“All right, The End,” responds one of the children, “Read it again.”

“Shall I read it again?” says Heather, “You can make changes if you want to.”

Heather reads the story again to much laughter and changes some parts of the story based on the children’s suggestions. The session ends as they move to another activity.

Figure 5.10. Story experience activities - Preschool
Alexa and Heather encourage participation in narrative by inviting comments and action

Example 2
[Day 1]

Following a discussion about where music comes from, Heather introduces Peter and the Wolf by Sergei Prokofiev as a story which has sounds that represent animals/characters. The CD the children listen to animates them and they imitate the sounds of the orchestra instruments. They act out parts of the story, pretending they are grandpa and telling Peter not to go into the woods, or pretending they are Peter holding a rifle. Later that day, Alexa reads the print storybook and the children have the opportunity to listen to the story and look at pictures of the characters. The book is available for them to look at during free time. During outdoor time they pretend they are the animals in a chase game.

[Day 2]

Today is a musical day. Heather explains about musical notes and how they are used on a staff to make stories in music. For their art activity the children make large notes and place them on a poster size staff to make a musical story. Later, at the end of free time, when they are playing sound games, Alexa asks the children to sound out all the animals in Peter and the Wolf. Towards the end of the day Heather puts on an audio tape of the story which has music in the background; some of the children participate by shaking their heads, swaying their bodies, and acting out duck motions with their arms. They are following Heather’s example. Heather
comments that it is difficult to listen to a story without pictures and that they have done very well. The end of the day story is *The True Story of the Big Bad Wolf*.

[Day 3]  
The television is set up with chairs in front of it and today the children watch the 1946 Disney video of *Peter and the Wolf*. They are very enthusiastic as they say it is just like going to the movies. The children comment to each other and there is lots of laughter. During Circle Time Alexa initiates a discussion about the animals in the story that turns into an action song/game.

[Day 4]  
Day Four is occupied with a music teacher and a doctor’s visit but the end of the day brings us another wolf story: *The Wolf’s Chicken Stew*.

A number of different stories are used throughout the year to maintain a theme throughout music, art, and play activities. Figure 5.11 shows activities from a week during which the theme was the *Nutcracker Ballet*.

*Figure 5.11. Story Experience Activities - Preschool*  
During a *Nutcracker Ballet* themed week: children working on a craft project, some of their artwork, and two girls using fairy wands in play during a *Nutcracker* moment.

In the preschool class print story is changed from words on a page to an experience through a regular association of stories with music, with art/craft activities, and with other play activities. Whereas the words on a page may have a story sequence that the children can listen to, this sequence is not always of importance. At times parts of the story that are most suitable for introducing a specific activity, such as making a craft, are emphasized. At other times, parts of the story which children enjoy hearing over and over again, are emphasized. When creating stories the children use beginnings and endings (Once upon a time, The End) as brief rituals. The stories themselves are a series of events without climax. These events are often personal, and may not relate to the story, but are at the forefront of a child’s mind, such as a recent activity with a parent or friend.
While the preschool allows the children to experience story without explanations about how story is structured, the next example shows that the experience in kindergarten has children examining storyline and the structural elements of print stories.

**Kindergarten**

In the kindergarten class, stories are discussed in more formal, structural terms. Sequence, characters, and setting are introduced as part of a story and discussed extensively. There is a performance of the story and backgrounds are painted, characters are drawn and cut out to use as large puppets. Children are encouraged to consider the sequence of events in a story and then to draw a story map which they compare with their peers story map. Age-graded stories are used as part of a literacy program during which children have the opportunity to read stories on their own and to share with older children in reading-help sessions. Personal storying occurs through journal making that includes both writing and drawing. Contextual stories are read for seasonal and cultural events as well as to encourage behaviour such as self-organization and making New Year’s resolutions. Print stories are read to the children as an accompaniment to snack breaks and as one of the activities during free time. The classroom routine offers two structured programs for story experiences, a language arts program and a literacy program.

The teacher interview identified that reading books was a very important part of a curriculum (five on a scale of one to five). She saw that children were interested in stories that are popular and that are humorous. Stories with sounds and lift-the-flaps were well received because the children enjoyed participating in the activities. She felt that the children would still enjoy the story without the added effects if the content was interesting. The teacher liked stories that had repetition of common words, that had actions, that could be used for discussions on topics such as friendship. She also liked stories that could be used to make story maps. Children listened to stories during snack time and discussed them during language arts. She saw that the children liked the endings of stories and in particular that they naturally reflected on them. She had not noticed the children using language during their daily activities from stories that had been read previously. Children read in the book corner when they finished their work. Reading was also an option during “Choosing Time.”

In the kindergarten, stories are used in language arts activities that are planned over a number of days. Following are two examples: the first encourages the children to understand sequence, character, and setting. The second has them working on a story map. Both of these examples use brief summaries as well as excerpts from the observation notes.
Example 1

[Day 4]

Today Ms. Koehle introduces the book *Brave Irene*. The discussion is first about bravery and what it means to be brave. The story is then used to introduce elements of story structure. The first activity is one that looks at sequence.

“In this story Irene is brave. I’ve copied out some of the pages for you and I’m going to divide you into groups and give you each one of these pictures. Then I want you to look at these pictures and put them in order of when you think it happens.”

At Shayla, Hannah (D), Hannah (P), and Alex’s table the conversation goes like this:

“I think this one was first, then the one with the box.”

“Then my picture,” says Shayla.

“No Alex, that’s not right.”

“Yes it is, but it looks like they put the dress in the box.”

After providing the groups with time for discussion Ms. Koehle gathers the children and asks, “How was Irene being brave?”

Jackson replies, “Walking all by herself, and carrying that big box.”

“Let’s read the story and see what it is about,” says Ms. Koehle. While reading she stops a number of times to ask questions about what might be scary events. Then she says, “I’m going to stop here,” though she is not quite finished, and starts a discussion, “What do you think Irene is going to do? How do you think she is going to get there?”

Shayla answers, “She might go back to her mother, and they would go look for the dress.” There are other suggestions before Ms. Koehle says, “I’m going to give you a piece of paper and want you to think about what is going to happen and draw it. Guess and we’ll finish the story.”

“I think she is going to find ice and slide to the palace. The wind is going to blow the dress,” says Isabella as she draws ice with a dress in the air above it.

Jackson has drawn a snowplow. The snowplow will rescue her and “bring her to the dress.”

[Day 5]

Ms. Koehle takes out *Brave Irene* and begins the literacy portion of the day.

“Yesterday you guessed some of the endings,” says Ms. Koehle. “Let’s go over some of these endings and see if any of them are similar.” Ms. Koehle takes the drawings the children have done and asks each child to give us his/her ending.

“She caught the dress and makes it close to the castle.”

“I thought she would be picked up by the castle.”

“I knew she was going to get to the castle.”

“She didn’t.” (Charlie)

“I thought the dress in the box she got it back.” (Lauren)

“I thinked the girl going to the Palace but the stick thingy was locked.” (Alex)

“She was going to slide on ice.” (Isabella)
“I thought that there would be a big storm and the dress would blow her away. (Torri)
“A snowplow would pick her up and bring her home. (Carson)
“I think she’ll get to the castle and find the dress.” (Jackson)

“So, did she end up getting the dress to the duchess? We’ll have to find out.” Ms. Koehle reads the rest of the story. Then she goes on, “I’m going to get you to think about two things that you might not have heard or you might have... character and setting. So what are characters? A character is a person or could be an animal in a book or a movie. Who are the characters or the person in the story: doctor, Irene, mother, duchess, servants, guests who were dancing.”

“Put up your hand if you think you know what the setting is. Snow... ah... the setting is where the story happens... the palace, the snow... the snow walk, her mother’s room, her house. We’re going to draw/paint the settings. I’ll give you each a partner and a paper to draw the characters and the setting and then we’ll talk about them. So when you draw them make them with lots of detail. Make the character as big as the piece of paper. And here is an even bigger piece of paper for the castle and the house – Irene’s house.” Ms. Koehle asks, “who wants to do the snow walk?” and who will be which character. The children take their pieces of paper to the tables. Individual students make the characters, and groups of three or four make the settings.

When the characters and setting are completed, the children act out the story. Ms. Koehle assigns characters to different students and assigns two people to tell the story. Alyssa and Hannah begin to tell the story. All the children blow and make wind sounds. The children tell the story in good detail and for some parts, such as the dance scene the entire audience gets involved and they all dance and make up the music. Figure 5.12 shows the activities the children were involved in.

**Figure 5.12. Learning about sequence, character, and setting**
A group of children making one of the settings, Ms. Koehle and the children discussing characters and setting. Ms. Koehle handing out characters for the children to play-act the story.

During our discussion at the end of the day Ms Koehle says that she is really surprised at the detail the children remember. Things like the dress blowing into the tree. “I only expected one sentence, but they seemed to know the whole story.” She tells me that they will act out the story again the next day, and other children will get a chance to act out the parts.
Example 2: Case study

[Day 1]

After morning activities Ms. Koehle says, “Everyone needs to turn around and face me. I’m going to read you a story. We’re going to read *The Snowy Day*. When I’m reading it I want you to think about all the things the little boy does and all the places he’s been. Because afterward we’re going to talk about these things.” Ms. Koehle proceeds to read the story. When she reads she stops at specific activities the boy is doing and discusses these activities with the children. “How does he walk?” she asks.

“First he walks with his toes in, then he walks with his toes out.”

“How come there’s an arrow?”

“I don’t know. Should we try to walk like he did… look at these marks… then he dragged his feet,” says Ms. Koehle.

We get to the part where the boy makes a snow angel and Ms. Koehle asks the class, “Has anyone ever made a snow angel?” Many hands go up. “Who can show me how to make a snow angel? Alex, what do the arms make? The wings, that’s right. Yes Hannah?”

“When I make an angel I make hands.”

When the story is complete Ms. Koehle says, “We’re going to finish the story now,” and reads the last page. She then goes over the story and writes the activities in a list on her flip chart, providing an illustration of each activity as well. In addition, as she reviews the activities, the children enact them “Where did Peter start his day? In bed. All right. Everyone lie down and pretend to be asleep. You are Peter. What happens now?”

When all of the activities have been reviewed Ms. Koehle sets the children their next task, “All right, now we are going to make a story map. Does anyone know what a map does? It helps you find your way. We’re going to make a map today… a map about what Peter has done, where he went.” Ms. Koehle takes a piece of white paper and pencil on which she draws elements of the story. “What should we make Peter? A triangle. Where was Peter at the start of the story? In bed, so we could put the triangle in the bed. What happened next? He went outside. It’s a snowy day. How can you show a really snowy day… snowflakes! Then he made tracks through the snow and you could make tracks. He comes to a tree so you could draw the tree, then there is a snowball fight so we can draw some snowballs… keep the arrows going so we know which way he is going. Draw all of these in pencil, then you can color them.” Ms. Koehle calls groups of children to get paper and to go to sit at their place and begin their individual maps.
Figure 5.13. *The Snowy Day: Storyline*
Ms. Koehle writes down the sequence of Peter’s actions. The children act out a snowball fight. The chart displays the sequence of actions for the story map.

Most children draw Peter rather than the triangle as his representation. Some children draw Peter in every activity; others draw only the activity. Ms. Koehle encourages the children not to forget their arrows so that they can see the connection between one drawing and the next. She helps by putting in many arrows that show how the events they have drawn are connected sequentially.

[Day 2]
The next day Ms. Koehle brings out the flip chart and gives everyone their maps to finish coloring. Ms. Koehle then reads the story again and reviews the steps written on her flip chart. She says, “I’m going to put you with a partner and you’re going to tell your partner about your story map. You might not remember the story the same way so it’s alright to share.” The children are partnered and have the opportunity to tell each other the story.

Figure 5.14 shows how individual children see the sequence of Peter’s activities. Notwithstanding the skill level in drawing and writing, there is a wide range of abilities to represent sequence. Figure A shows a “bunch” of activities, Figure B shows a neat sequence of events, Figure C emphasizes the arrows that provide for the sequence, while Figure D emphasizes the character in each of the sequences.

Figure 5.14. Examples of story maps for *The Snowy Day*
These two examples show the kindergarten class in the process of learning about traditional story structure by being introduced to sequence, character, and setting in a story. Through a number of different activities, which include drawing and playacting, they become familiar with the terms and the concept behind the terms. Though moments in story are highlighted through action (such as making snow angels), story is presented as a whole and the idea of sequence is reinforced by making story maps and discussing them. At this age, ideas of narrative are still associated strongly with art and craft and with action and performance, and not only with text.

While in preschool children experience story with little concern for explanations about how story is structured, the kindergarten experience on the other hand introduces children to storyline and the structural elements of print stories. In both cases art, craft, and action are important ways to enhance story, and in the kindergarten performance is added as an additional practice.

5.5. Characteristics of Print Narrative Experience

These observations, together with personal observation in my own home and homes of friends, confirm that the narrative and literacy activities teased out of our history continue to be a part of children’s lives. We have identified the different activities and grouped them into practices. To provide relevance for our question we need to attribute characteristics to these practices and it is most useful to do so with the characteristics of narrative game play in mind. The set of characteristics of game play applied here is derived from an analysis of the history of digital narrative, new media theory, and observations of children playing games. Further information on how this taxonomy of game characteristics was developed is found in Chapter Six under Game Characteristics. These characteristics are: social (provide interaction with individuals or a group), interactive (provide mutual or reciprocal action or influence), engaging (attract and hold attention), multimodal (use different modalities), spatial (use space), providing agency (offer opportunities to make decisions independently), transformative (offer opportunities to change character or condition). In this next section I draw on previous material on narrative and literacy practice in this chapter and present it anew in the context of these characteristics.
Social Experience

For young children, reading stories is a child-centered and positive social interaction and includes parents, relatives, siblings, and caregivers. Family-child engagement has been recognized as important in children's literacy learning since as early as the end of the seventeenth century. In prescribing social activities to teach literacy, Thomas Tryon shows us that learning to understand text is more than a semiotic experience, it is a social experience during which children and adults interact within a cultural context.

Isaac Watt, in Divine Songs, presents an eighteenth century visual ideal of a parent providing moral instruction to a child by reading with them. Comfortably seated on the parent's lap, a child enjoys a social and educational moment with Watt's book of poetry (Figure 5.15).

Figure 5.15. A child sitting on her father's lap, reading. From Isaac Watts "Obedience to Parents," Divine Songs (1715)

Parent-child engagement in narrative literacy activities creates a social ecology that involves the child, the parent or sibling, and the narrative artifact, with a resulting interaction that makes meaning for the child. In doing so, it associates narrative with social engagement within the child's emerging perception of narrative.

Narrative continues to be socially constructed and multimodal for children as they enter preschool and kindergarten. Children read together with their peers in groups of two or three. They listen to stories and participate in discussions of these stories as a group. Children also participate in oral recitation and singing of stories with their classmates. Caregivers further

---


230 Demers, From Instruction to Delight: An Anthology of Children's Literature to 1850.

extend the social interaction and collaboration opportunities by encouraging group performance oriented activities such as puppet play or playacting.\textsuperscript{332}

**Interactivity**

Interactivity has a long history in children's print narrative experience. It progresses through different levels of engagement through the centuries. Both the eleventh century *Colloquy* and the seventeenth century *Orbis* encouraged oral interactivity based on using the text in a dialogic fashion. In the seventeenth century, Thomas Tryon and John Locke encouraged interactivity with narrative artifacts. Locke's suggestions included using contrivances common at the time, such as a many-sided letter dice, while Tryon's included associating words with common household items. In the eighteenth century, movables brought physical interaction directly into the narrative artifact and gave readers the opportunity to change the story content themselves.

Physical interactivity with books has different purposes. In some books, actions are incidental and don't affect the story; in others, interactivity moves the story forward. Two books that show the difference are Disney's *The Night Before Christmas* and Lisa McCue's *Animal's Advent*. In the Disney version of *The Night Before Christmas*, the Clement C. Moore story is told using classic Disney characters. A major feature of each double-page spread is a favorite-character ornament that can be pulled out of a slot and hung on a Christmas tree. This activity is not crucial for the story to move forward but does make it more engaging. In *Animal's Advent*, each page consists of an illustration of a winter scene with sequential numbers on the different items represented on the page. There are twenty-five numbers throughout the book, three to five on each page. Behind each number is a picture of an animal and a rhyming couplet that follows the previous one and continues the story of the animals getting to the Christmas tree. If these are not opened in sequence or if one is missed, then the story is out of order or not complete. *Our House* (National Geographic) uses lift-the-flap, *Bedtime for Bunnies* (Random House) uses peep-through-the-opening, and *Bear Gets Dressed* (Harper and Row) uses lift-the-page interactive techniques to involve children in the story and have them progress through it. Children delight in using these devices when interacting with such books.

An important feature in young children's narrative is the flexibility for moving back and forth within the story without any loss of the enjoyment of the storytelling experience. This reflects authors' understanding of children's equal interest in the repetition of specific events in a

\textsuperscript{332} Madej, *The Dynamic of Young Children's Emerging Narrative Process*. 

118
story, and in the continuation of the story. This flexibility exists within picture books because the combination of illustration/graphics and brief text can provide information quickly and concisely in small chunks, i.e. on one page, on double page spreads, or within a few pages.

The interactivity displayed in these examples offers different levels of engagement: the cognitive interactivity with the story, the social interactivity through dialogue, the physical activity of manipulating the book, and the participatory interactivity of manipulating the story.

Engagement

The practices which make children’s narrative experiences social and interactive also make it engaging, and over the years educators and parents endeavored to achieve this quality. An early example of the development of new techniques to create engagement is Comenius’s *History of the World*. Intended to teach Latin, this book included Latin juxtaposed with the vernacular together with contextual illustrations of the natural world. This new way of juxtaposing information and presenting it proved so effective and popular, the book was used for a hundred years.

The evolution of *Aesop’s Fables* shows us that authors and publishers strove to create books that were engaging by consciously orienting text to children and by using illustrations that have “an alluring force... on the minds of children” and “excite their curiosity and stimulate their attention.” Isaac Watt’s interest in engaging children brought him to use rhyme and cadence in his lyric poetry in *Divine Songs*, believing that these would amuse, entertain, and encourage children in the practices suggested. A particularly influential argument Locke provides for engagement in learning is his comment, “the chief art is to make all that they have to do, sport and play too.” Illustrations, rhythm and rhyme, and the interactivity of moveables and paper dolls engaged children in narratives as “sport and play.”

Multimodality

Above all else, children’s early experiences with narrative are multimodal. Their books are toys that they can play with physically as well as engage with cognitively. Publishers have made every effort to put in their way merchandising associated with books that allows them to take their favorite stories and roleplay (from Barbie to Mortal Combat), build (Lego Starwars), play

---

334 Ibid. §63
335 Locke, *Some Thoughts Concerning Education.*
336 Ibid. pp. 74-77.
(Thomas the Tank engine), color and cut (any of those mentioned), make to eat (Winnie-the-Pooh gummies), and perform (Clifford puppets). For children, these artifacts are an important addition to the experience of narrative. They will, for instance, become Tigger by wearing a Tigger costume for days, if not weeks, and doing everything from eating to sleeping in Tigger mode (voice, manner, and general jumpability). When they make these stories real for themselves through different modalities, they include their particular interpretation in the narrative schema they are building.

Constructivist learning theory tells us that children construct their learning through doing and the multimodality of early children’s narrative experience allows them to “do” stories in many ways. The more ways children experience the story the better they understand.337

Space

Children engage with story within a space. In their immediate space they can hold books and manipulate different kinds of movable parts. In this same immediate space they can fingerplay and do actions that are part of the story. Children move out into the larger environment when they are undertaking performance-oriented activities, such as puppet shows or plays, when they are dancing, or when they are using artifacts such as doll houses, train sets, or zoo sets to play their stories.

Agency and transformation

With the advent of paper dolls children could cut out and play with characters from stories. The addition of these toys to the reading or listening experience provided more opportunity to include peers in social and creative play, and provided young children with opportunities “to enact stories rather than merely witness them.”338 When pretend playing with a peer, a child is no longer in an event structured by an adult but in one where s/he is responsible for the characters and events of the story and for creating her/his own version of that story, in effect turning an embedded narrative into an emergent one. The ability to make decisions on their own provides children with a sense of agency that the child can exercise. When stories are used for playacting, they provided children with opportunities for taking on a persona that is not their own, and for changing a story or adding to it and making it their own.

Figure 5.16 provides a summary of narrative and literacy practices that have been discussed in this chapter. I order the practices from children’s progressive experience of print narratives. For example, young children first experience storytelling sitting on a mother’s or father’s lap. This is Social Interaction. In the next stage, they are often shown a picture book. This is Story/Narrative Text Interaction. Then they are given a soft-covered book to hold. This is Narrative Artifact Interaction. This chart is used as a base for the visual (Figure 7.1) which connects print and game experience in Chapter Seven.

**Figure 5.16. Early print narrative experience practices**

| Social interaction: | with caregivers  
|                    | with peers  
| Story/Narrative text interaction: | listening, looking, discussing  
|                                  | singing, rhyming  
|                                  | making up stories, poems, rhymes  
| Narrative artifact interaction: | manipulating movables  
|                                 | playing with dolls and toys  
| Multimodal play: | creative play with art/craft such as painting,  
|                  | drawing, cutting and gluing, sculpting  
|                  | constructive play such as building with blocks  
|                  | doll houses, farms, zoos  
|                  | physical play such as fingerplay, story actions  
|                  | performance such as playacting (playing house with play  
|                  | furniture or dollhouse furniture), dancing, making music,  
| Use of Space: | using space through performance such as dance, playacting  
|               | creating story spaces: castles, doctor’s offices, restaurants  

**Summary**

In looking at the history of children’s literature, we see that the change in approach to narrative has been towards dialogue, context, pleasurable activity, interactivity, and entertainment. The content of children’s narrative has changed from purely prescriptive courtesy and ABC books to fictional and factual stories that present the gamut of knowledge available to humans. Books, in addition to becoming the repository of the world’s knowledge, also became teachers of this knowledge. While narratives have always passed on culture’s history and mores, parents and educators began to use print narratives consciously to shape children’s ideas about themselves and the world around them.
As social values changed, so did the content of books and literacy practices associated with books. Always a social activity, literacy learning began to include artifacts and play activities to encourage engagement. This changed the nature of the text artifact itself by adding more pictures and making it interactive through movable parts, and changed the nature of the experience by making it multimodal. Current practices show that this approach continues. There is a change, however, in the purpose and kind of these activities. From preschool to kindergarten, teachers move from presenting narrative as a part of their everyday creative lives to introducing it as a structural form with elements that require explanation and study. The activities surrounding narrative which in preschool are intended to enhance the narrative, are in kindergarten used to explain the narrative. This chapter concludes by presenting a set of practices that it juxtaposes with characteristics of narrative game play showing their connection.
Chapter 6. Changing Media

This chapter provides a brief history of the development of digital narrative and the nature of narrative in games for children today. It examines child-game engagement and provides a set of characteristics of this experience.

People's response to new technologies reveals to us not something about the technology but something about human nature: whether it is a love of acquiring information, a desire to be immersed in exciting events, a need to be stimulated, or lulled, or dulled. History reveals the multiple dimensions of our society through the varied, sometimes narrow, often opposing, and mainly insular responses to and criticisms of a technology as it develops. Though, over time, there is accommodation and increased acceptance, certain anxieties seem to be persistent. "Information overload," "unmanageable excess," "addiction," and "violent stimulation" have been used to describe in their turn print, movies, television, and now computer technologies. 339 These descriptors point to the complexity of sociological issues associated with communication technologies more than they do to the deficiencies of any specific technology. The computer scientist Alan Kay says, "There has always been a confusion between carriers and contents." 340 Educator Neil Postman echoes this view when he notes that humans prefer to blame or use technology as an excuse for problems to which, ultimately, technology is not the key. 341 An ironic example is the parent who tells his/her preadolescent child to read a book instead of playing an adventure video game. Three hundred years ago, chapbooks with their stories of knight's adventures were considered violent stimulation and unsuitable for young eyes.

To provide insight into the state of stories in new media, this chapter presents a brief history of the two roads down which digital narrative diverged early in the development of computer technologies: hypertext and eliterature in computer environments, and game narratives for computer and video game environments. The chapter then shows how children were introduced to computers and consoles for educational and entertainment purposes. It discusses the history of the development of children's digital narrative since the 1980s, presents the three main genres: edutainment, hypertext on the world wide web, and video games, and describes how market forces favored the growth of video games. The chapter then provides statistics on the increased presence of games in children's information and media mix at ever younger ages, the anxieties about games, and the lack of a range of narrative schema. Finally, considering these

341 Neil Postman, Building a Bridge to the 19th Century (New York: Alfred A. Knopf, 1999); Kay, "Computers, Networks and Education."
discussions as well as media theory and observations, it presents the characteristics of game experience.

6.1. Digital Narrative

The use of computers for other than computational purposes is barely in its fifth decade. Its use in bringing stories to children is even shorter, only since the 1980s. In the early 1960s, computer input and output was still delivered via punch cards. Research at two universities set the stage for innovation in two different directions in narrative: hypertext and games.

In 1960 Harvard graduate student Ted Nelson was looking for a text handling system that would more closely resemble the free association of human thought process rather than the linear process of written words. He thought of it as a “a body of written or pictorial material interconnected in a complex way that could not be conveniently represented on paper.”342 The term hypertext was coined by Nelson at the 20\(^{th}\) ACM national conference (1965) as “the use of computers to express the nonlinear structure of written ideas.”343 Hypertext became the common language used in communicating with computers and gave authors access to tools for creating interactive stories.

In 1962 the game Spacewar! was conceived by Martin Graetz, Steve Russell, and Wayne Wiitanen, to spotlight the new feature of a recent PDP-1 computer installation at MIT: a monitor. The first real computer game that was programmed rather than being hard-wired into electronic circuitry, it showed the way for creating environments in which players could control action. Spacewar! traveled to university campuses across the continent and inspired an upcoming generation of game innovators such as Nolan Bushnell, the founder of Atari.344

Hypertext

The development of hypertext provided narrative with a new medium in which to grow. Made up of nodes and links, hypertext could interpret networks of ideas, cross-reference them, and present them in intricate and complex structures more creatively, reflecting the non-linear


344 http://wheels.org/spacewar/creative/SpacewarOrigin.html
process of human thought. It allowed a reader to participate in a dynamic and complex world. Figure 6.1 illustrates a basic hypertext.

**Figure 6.1. A basic hypertext system**

A hypertext system consists of nodes (concepts), in this case pages of text, and links (relationships). Nodes can be text, graphics, animation, audio, video, or programs.  

![Diagram of a basic hypertext system](image)

Ultimately “hypertext alters writing ... by increasing the power of expression and challenging the inventive process of both authors and ... readers.” Its ability to encompass stories that include interactive exploration and discovery offered potential for creating a new kind of storytelling that included readers in different ways. Yet that potential developed slowly as the computer revolution followed the early response pattern of other technological revolutions. Initially narrative made a “straight port from the old technology” and presented itself as it had on the printed page. First came efforts such as **Project Gutenberg**, which digitized the publicly available literature in U.S. libraries in a language accessible on all computer platforms. With advances in technology and changes in approach, narrative evolved into hypertext works such as Michael Joyce’s novel **an afternoon**. An environment of writing “as a flood of thoughts” was created as authors found electronic writing technology was adaptable and inclusive of different forms of representation.

In 1987, the release of Hypercard made hypermedia a reality and provided authors with a simple technology to create interactive versions of their own stories. No longer limited to textual

---

248 Currently Project Gutenberg houses 17,000 books digitized in Plain Vanilla ASCII.
249 [http://www.eastgate.com/catalog/Afternoon.html](http://www.eastgate.com/catalog/Afternoon.html)
expression, authors could connect and interweave words, images, video, and audio. “Hyperfiction authors have responded... by renegotiating the relationship between word and image in their work.” 351 Authors took advantage of hypermedia to create such eliterature as *Califia*, a CDROM novel written by Marjorie Luesebrink that includes text, sound, photos, and animated text and images. 352

Readers of this new genre of narrative were provided with a story that they could enter at different points and through which they could take different paths. *Califia*, though grounded in text, provided for a multimedia story experience. Figure 6.2 shows screens from the story.

**Figure 6.2. Luesebrink's Califia**

*Califia* provides readers with different paths into the story of five generations of a California family searching for gold. It is told through text, pictures, graphics, video, and audio effects.

---

**Games**

Game technology also provided narrative a new medium in which to grow. While *Starwars!* engendered all later action games beginning with *Pong* (1972), 354 Will Crowther’s *Colossal Cave Adventure* (1972) became the first narrative adventure game when it merged plain computer text with a software program that moved the player through a series of caves. This program found its way to computer sites at universities and colleges across the country and influenced and inspired the next generation of game designers. 355

Crowther was a program developer and spelunker (caver) who enjoyed role-playing board games such as *Dungeons and Dragons*. He wanted to write a computer game for his daughters that would be fun and would also let them experience caving. *Colossal Cave* is designed as a

---

355 http://www.rickadams.org/adventure/a_history.html #bid.
first-person game so that the player moves through the game environment as her/himself by making decisions about which path to take. See Figure 6.3. Unlike hypertext, which lets a reader explore within an author’s experience, first-person games let the player not only enter the experience, but also make it their own.

**Figure 6.3. Adventure**

![Image of Adventure game interface]

In 1979, after she had played *Colossal Cave*, game designer Roberta Williams sat down at her kitchen table, and mapped out and wrote *Mystery House*. Roberta says of the game’s development, “I wanted something with a good story, but it also had to be a game. Stories tend to be linear – beginning, middle, climax – and I needed to expand into ‘What if they want to do this? Or that?’ My main inspirations were Agatha Christie’s *Ten Little Indians* and the board game *Clue*. I used the idea of *Clue* to pull me out of linear thinking.” Roberta also thought the game would be more engaging with graphics and produced seventy simple drawings for it (Figure 6.4). Her husband, Ken Williams, programmed the game and their company On-Line Systems (later Sierra On-Line) released what was the first graphical text adventure game in May 1980.356

**Figure 6.4. Mystery House**

Roberta Williams added simple line graphics to increase the appeal of her detective story.357

---

356 Ibid. p. 138.
357 Photo at http://www.mobygames.com/game/apple2/mystery-house
In 1984, Sierra was asked to develop a game by IBM for their new machine the PCjr. They created the first story with animated characters whose actions the player could control. *King's Quest*, "An Animated Adventure Game," was the first of the adventures and was soon joined by episodes such as *Romancing the Throne, The Perils of Rosella*, and *Mask of Eternity*. While initially their stories included many traditional story characters such as Beauty and the Beast, Rumplestiltskin, and Red Riding Hood, later stories included more original characters.

In previous games, players participated in adventures as themselves; these were considered first-person adventure games. *King's Quest* changed the game play from first-person to third-person. "In the old games," remembers Roberta, "they were stories that you experienced from your own eyes. But with the little guy running round, it's not you, it's him or it's her... once you start thinking in third person instead of first or second, you have to think, Who is this person and how is he going to interact with the other characters? When it was you, it was your personality. Now it was someone else with his or her own personality." In a first-person game, the player assumes the role of the character when making decisions about moving through the story. The third-person position allows the player to think about the character either as her/himself, or as a separate character altogether. Figure 6.5 shows four characters in a *King's Quest* scene.

**Figure 6.5. King's Quest**

*King's Quest* introduced the third person view in which the player controlled animated characters.

At the same time that Mystery House was being released in 1980, the role-playing game *Temple of Apshai* was boasting "Explore a world of monsters & magic, heroic adventure! A fantasy role-playing experience for you and your computer." As with Mystery House, *Apshai*'s

---

358 Roberta and Ken Williams had started their small programming company, *On-Line Systems*, in 1979, never envisioning how big the computer games industry would become. "We thought computers and software would always be a small industry, of interest only to hackers and hobbyists like ourselves." *On-Line* changed its name to *Sierra* in 1982. DeMaria, *High Score: The Illustrated History of Electronic Games*, p. 134

inspiration came from print texts and their heroes. The manual’s introduction to the game asks players:\(^{360}\)

> Did you grow up in the company of the Brothers Grimm, Snow White, the Red Fairy Book, Flash Gordon serials, The Three Musketeers, the knights of the Round Table, or any of the three versions of the The Thief of Bagdad? Have you read the Lord of the Rings, the Worm Ouroboros, The Incomplete Enchanter, or Conan the Conqueror? Have you ever wished you could cross swords – just for fun – with Cyrano or D’Artagnan, or stand by their sides in the chill light of dawn, awaiting the arrival of the Cardinal’s Guard? Ever wondered how you’d have done against the Gorgon, the hydra, the bone of Heorot Hall, or the bull that walks like a man? (…) If any or all of your answers are “yes,” you’re a player of role-playing games–or you ought to be.

**Figure 6.6. Temple of Apshai by Epyx**

Game cover, game screen, and manual from the adventure game *Temple of Apshai*.\(^{361}\)

Though all adventure games provide a sense of role-playing, CRPGs, or computer role-playing games contain features which originated with the RPG boardgame Dungeons and Dragons and have become a separate genre within games. Distinctive RPG features include being able to create a character with characteristics such as strength and intelligence that can be changed during game play. Players have responsibility for characters in a more obvious way than in regular games. In CRPGs players can transform characters by adding or increasing skills as well as transform themselves by taking on a persona.\(^{362}\)

Throughout the 1980s a wide range of adventure games were made as developers explored new territory. With the introduction and enormous financial success of the game *Doom* in 1993, the first-person shooter became “the de facto standard for game publishers,”\(^{363}\) Games such as *Doom* had very simplistic stories and relied primarily on action. *Sierra*, many of whose products

---


\(^{361}\) Game, screen, and manual images courtesy of gotcha classicgaming.gamespy.com and free-game-downloads.msw.com.

\(^{362}\) Barton, *The History of Computer Role-Playing Games Part I*.

contained strong story lines, took the first-person shooter and added character interaction and a
dramatic story to make the successful game, *Half-Life*.

6.2. Children’s Digital Environments

Children, computers, and game consoles

Console games have been available for play since the analog *Odyssey Home Entertainment System* was first marketed to consumers in 1972. Nolan Bushnell brought arcade-type games to
digital with Atari’s Pong that came on stream for the home market as the *Sears Tele-Games*
system in 1975. In the late 1970s and early 1980s, the beginning of the era of personal computers
brought the Apple II, Commodore PET, and Tandy TRS80 to homes, along with the text
adventure game *Adventure* and the role-playing game *Temple of Apshai*.

Computers were already becoming a part of elementary and secondary education culture.
In the late 1960s Seymour Papert, a professor of applied math and education at MIT, worked with
the psychologist Jean Piaget and developed a new theory of learning called constructionism.
Basing his ideas on Piaget’s constructivist theories that linked learning to doing (discussed in
Chapter Three), Papert considered the computer an ideal tool for learning to do things. He
believed that children should program software to learn such things as math principles, rather
than use existing software to play math games. His work was highly influential and encouraged
the use of computers and software programs as a supplement to math, science, and reading and
writing courses in schools. Educators found that children were drawn to the active engagement
computers offered, and that using the computer “made kids smile and want to try more.” They
were supported by educational computing organizations such as the Minnesota Educational
Computing Consortium (MECC). When MECC chose Apple II computers for their schools in
1978, they began developing software programs such as *Oregon Trail* to support classroom
instruction. MECC software helped to make computers popular for use by children at home, as
parents could see these programs as learning aids.

Computers were sold as education aids to improve learning skills and, along with game
consoles, were sold as entertainment to be enjoyed with family and friends. Coleco’s *Adam*, for

---

364 This was a version of the popular *Colossal Cave Adventure*. Ibid.
366 MECC was established in 1973 by the State of Minnesota to help schools plan for their use of computers. It produced educational
software that also became popular for use by children outside the school such as *Oregon Trail, StoryWeaver, and DinoPark Tycoon*.
367 Apple has been involved in education since the AppleII was chosen by MECC for use in Minnesota schools in 1978 and provides
information on its programs at http://apple.com/education/research.
instance, was promoted as a *Family Computer System*, and advertising shows scenes such as a mother and her daughter using the system for word processing, and a father and son playing games.\(^{368}\) While the market for earlier games had been adolescents, ages nine to sixteen, once games were marketed as family entertainment in the mid-1980s, their target audiences dropped to include younger children. Television ads for Coleco and Atari games from 1983 and 1986 showed early elementary school-aged children playing games, and encouraged social play that included parents as well as peers.\(^{369}\)

**Figure 6.7. Coleco’s ADAM**

Coleco advertised its video games as social entertainment for the whole family.

---

**Children’s digital narrative**

In 1987 Amanda Goodenough created *Inigo Gets Out* using HyperCard, an easy to use software programming tool that Apple introduced that year. A children’s illustrated story that is “the first graphical hypertext and, arguably, the first HyperCard narrative,”\(^{370}\) *Inigo Get Out* lets children explore a space that the cat Inigo inhabits. Children can explore a garden, a river, and a house, and make the story move forward by clicking: for instance, clicking at two birds will make the cat jump at them.\(^{371}\) With this simple program Goodenough “opened the eyes of artists and designers,”\(^{372}\) as well as some writers, to the possibilities of interactive animation in hypertext for children. Goodenough was raised on oral stories and in her work tried to capture the changeable and interactive nature of oral storytelling. While this was difficult for her to achieve in the traditional text medium of print and in early hypertext, *Inigo Gets Out* captures this vitality by

---

\(^{368}\) This and other ads can be seen on pages 69, 71, and 96-97 in DeMaria, *High Score: The Illustrated History of Electronic Games*.


providing for changeability in the story through interactivity with the characters—children get involved with Inigo as he explores his house and his outside world (Figure 6.8).

Figure 6.8. Inigo Gets Out
Children can move the cat Inigo through his environment of a garden, a river, and a house by clicking in the direction they would like him to go.

Inigo Gets Out created interactivity for children in a delightful, personal story. Interactivity in stories was something that games also offered. In 1988 Roberta and Ken William’s company Sierra, introduced the narrative game Mixed-up Mother Goose for young children for both game console and computer play. It featured eighteen nursery rhymes in the land of Mother Goose who needed help because the rhymes had gotten mixed up. The player picked one of eight characters to be her/his avatar and searched for items throughout the land. Once the item was found the children could get the story characters out of predicaments: they could help Humpty Dumpty by bringing him a ladder and Mary by bringing back her lamb.

Figure 6.9. Sierra’s Mixed-Up Mother Goose
One of the first titles for children to offer educational games as well as stories.

---

373 A 1989 study of preschool children’s use of Inigo showed that the game was played successfully by children as young as age five. The study indicated children who were three and four were not familiar enough with a mouse to play the game. Jacob Nielsen, and Uffe Lyngbæk, “Two Field Studies of Hypermedia Usability,” HyperText: State of the Art, ed. Ray McAlaese and Catherine Green (Oxford: Intellect Ltd, 1990).
374 Graphic at www.smackerel.net
375 An avatar is the child’s representative in the game.
376 Because Mixed-Up Mother Goose is a puzzle not only a story, and offers opportunity for learning other than the social lessons of the stories, it is considered one of the very first edutainment titles.
The interactivity in *Mixed-Up Mother Goose* includes solving a puzzle, which is a more complex task than choosing actions as in *Inigo*. Children must first find and identify objects and then move them to a new location. The didactic purpose in *Mixed-Up Mother Goose* was cognitive development. Wartella tells us that greater potential for interactivity “holds promise for enriched learning experiences.”

What is being learned through story here? On the one hand, story is a representative of culture and passes on society’s lessons to children, on the other hand story is a vehicle for cognitive learning—these are not necessarily exclusive but often work at odds with each other as do the traditional views of art and science. Voyager says of Goodenough’s stories, “As children, we loved Jean de Brunhoff’s Babar Books; it never bothered us that the king of elephants didn’t look much like his real counter-part in pictures brought to us by magazines like National Geographic. Amanda Goodenough’s delightfully idiosyncratic freehand drawings will never win any prizes for camel anatomy, but their charm and completely personal nature won us over in the same way. If you’re expecting full color animation, *AmandaStories* isn’t the way to go, but its simple integrity has an appeal all its own. And the affection between the little girl and Inigo the cat is palpable.”

*Inigo* is written by a children’s author with a user-friendly programming software, *Mixed-Up Mother Goose* is written by game designers interested in creating game activities for children from familiar stories. One shows strength in interactive story, the other shows strength in interactive action.

Narrative for adults took two distinctive paths early in computer development, both of which have had success: hypertext which became eliterature on the web and game narratives. Narrative for children took a different route. Explorations in children’s hypertext have never achieved the technical sophistication of adult works such as *Califa*. Instead web-based stories remained text and graphics on a page for much of the 1990s and children’s hypertext such as Goodenough’s *Inigo Gets Out* moved in the direction of Roberta William’s *Mixed-Up Mother Goose*. CDROM technology provided the vehicle, and educational interests the impetus, for a number of interested parties—children’s book publishers, educational organizations, and an author (Mercer Meyer)—to bring more children’s stories to digital.

---

379 Voyager published a collection of Goodenough’s stories that consisted of ten *Inigo* and *Your Faithful Camel* stories as the *AmandaStories* as a CDROM in 1993. These included color and music.
Edutainment

When home computers came to be associated with education, publishers realized that parents were prepared to buy software programs that would actively engage their children in learning. Computer games and education software were then intentionally combined to create *edutainment*, programs that would both entertain and educate in the time honored tradition suggested by John Locke and acted on by John Newbery and other book publishers in the eighteenth century. Interaction has long been known to improve the learning experience by providing for engagement through responsive behaviour. Whereas previous media such as television required children to sit and watch, computers provided potential for actively engaging children through interactivity. The 1990s saw thousands of edutainment titles that used the interactive capabilities of computers to engage children for learning purposes produced and sold for home use. Edutainment came in three main formats: games (which were the most popular), clickable picture books, and topical formatting (reading, math).

When edutainment titles that featured narrative were first produced on CDROM they took the “straight port from the old technology” route and relied on a book interface for presenting stories. The first children’s CDROMs remediated existing children’s stories such as *The Tale of Benjamin Bunny* (1991), shown in Figure 6.10. These were produced to look like their printed counterparts with a cover, frontispiece, and pages with text and illustration. Children turned the pages as in an actual book and read the story for themselves. Alternatively, they could prompt the computer to read the story aloud to them. At the click of a mouse, the program repeated sentences or paragraphs and pronounced or defined highlighted words. Music and sound effects could be activated to accompany the stories that were available in at least two languages, and occasionally three or four. In addition to being able to read texts and look at illustrations, children could also enjoy the physical activity of making things happen. Parents and caregivers could guide children through the stories, however, the programs were designed to be sufficiently simple for children to use on their own. The basic interactive elements of these early versions of digital narrative, such as turning the page, echoed the interaction children had with print books, while the friendly voice that provided instruction and read the story acted as parent or caregiver.

---

380 There were titles such as *Snooper Troops* (1982), created by Spinnaker Software Corporation, that included many of the features of *edutainment* before the word was coined and it became a genre. *Snooper Troops* was the first in a series of educational adventure games that featured puzzle-solving detective vignettes that encourage children to map neighbourhoods, get special messages, collect fact on people and eventually find the criminal. It was released for both computers and game consoles.


382 The best known producers of edutainment software were Discis, Broderbund, The Learning Company, Simon and Shuster Interactive, and Disney Interactive.

383 Brandt, "Porting to the Web."
The target age for these stories ranged from two to twelve and depended more on the approach of the publisher than on suitability. In 1993 Voyager suggested children two and up could click their way through AmandaStories while in 1994 the Discis user manual for the CDROM Mud Puddle says “The Kids Can Read series contains selections of classic and contemporary children’s literature that appeal to children between the ages of 4 – 12.”

The Kids Can Read series made suggestions for parents on reading with their children and using the computer as an extension of that experience:

Parents are a child’s first teacher, and reading with your child is one of the most valuable activities you can engage in to foster a love of learning and reading in your child. Whether your child is just starting to read, or is already a fluent reader, having a story read aloud is an enjoyable experience. A Discis Book is a natural extension of that read-aloud, shared-reading experience. With a Discis Book children have the opportunity to engage in a pleasurable reading experience with you, their parent, and with the computer, a patient, always available teacher.

Quoting known educational authorities, Discis presented educational theory about developing children’s reading skills and making them independent readers. It discussed opportunities for reading the story all at once, phrase-by-phrase, or word-by-word, interacting with illustrations, and listening to the sound effects and music. The manual suggested home activities for after reading and provided recipes for “mud,” recommended borrowing the book from the library, and suggested bath activities to go with those in the story. These activities parallel literacy strategies used with print books, and indeed these were print books, only presented in a digital environment.

---


385 This and subsequent quotes Robert Munsch, Mud Puddle, Kids Can Read (Buffalo, NY: Discis Knowledge Research Inc., 1994).
Mercer Mayer was one of the first children’s authors/illustrators to take advantage of digital technologies to bring his stories to children by providing interactive play opportunities in *Just Grandma and Me* (Borderbund 1991). This is one of the first of the clickable children’s books. While images on the screen reproduce the print book pages, the characters are animated. Once the text on the page is read by the narrator, the story animation stops and children can click on artifacts to start short, site-specific animations: a bird flies out of its nest, a squirrel comes out of a tree knot, a plane flies through a cloud. Usually three or four different animations can be accessed successively at the same spot. Each of the animations is specific to the item but not necessarily to the story, and the interaction does not affect the storyline. This is the type of activity that children enjoyed with lift-the-flap print books and although it is interactive, it does not create the change in the story that either Goodenough’s *Inigo* or Sierra’s *Mother Goose* game creates. Mayer was one of the few children’s authors interested in producing his stories digitally. He started Big Tuna New Media to produce and develop his next CDROM, *Just Me and My Dad*.

Other popular children’s print stories were also made into clickable books. The *Little Critter* stories were soon joined by traditional stories such as A.A.Milne’s *Winnie-the-Pooh* and Ludwig Behmelmans’ *Madeline*, as well as more contemporary stories such as *Clifford the Big Red Dog, Thomas the Tank Engine*, and *The Berenstain Bears*. All of these CDROMs featured familiar children’s stories that had been remediated in audio, TV, and video previously, and extended the stories into this new medium. These efforts were initiated by publishers interested in entering the new edutainment market rather than by authors.

The absorption with narrative as an educational means became more pronounced in children’s software throughout the 1990s. Parents did not want their children to just read or play on the computer, they wanted the computer to be used for learning. Many popular characters familiar to children from their preschool story years, such as Sesame Street’s *Elmo*, Dr. Seuss’s *Cat in the Hat*, Disney’s Woody from *Toy Story*, and even *Superman* were featured in educational software packages. In addition to storybooks, these programs consisted of grade-specific school activities including math, English, and science (also known as Topical Programming). Though there were many stories being written to serve educational purposes, from learning to read to understanding science, stories such as *Inigo Gets Out*, intended as reflections of life and people’s

---

386 http://www.littlecritter.com/
387 http://www.littlecritter.com/index.html
involvement with it, were not being written. Unlike the 1950s and 1960s when, despite a strong educational bent, significant children’s stories were published (Charlotte’s Web, My Side of the Mountain, the Narnia Books), authors with something to say were not using the digital environment to say it.

There are a very few exceptions. TIVOLA Publishing, a small game development company “creates, designs, and publishes interactive stories for children from as young as three right up to 102.” The company has a commitment to “producing multimedia of the highest quality that promotes playful and inquisitive learning by offering children a clear concept, a non-linear, exciting and funny story with a true plot plus a large portion of interactivity and original and witty animation and illustration.” It has won several awards at the Bologna International Children’s Fair for the quality of its children’s software. These programs are not available in retail stores, only online. They are a miniscule part of the market.

Today, a quick look at Children’s Technology Review, which provides reviews of upward of 100 children’s titles a month, shows that it does not list narrative as one of its categories, as it does logic, math, health and others. Edutainment itself is in decline as learning strategies in these games have not progressed. Many of the activities that were once exclusive to such games are now readily available on children’s educational internet sites. In addition, parents are choosing a more holistic approach to learning, and are accessing a wide range of educational tools from flashcards to Leap Pads.

The World Wide Web

When the World Wide Web opened the door to a simpler way to bring stories to digital, authors began to create digital stories for children and self-published their work through websites such as Banph (1994), Chateau Meddybemp (1995), Fablevision (1996), and Little Critter World-Wide Network. In the first instance, the stories at these sites were simply text and illustration with interactivity limited to moving onto the site and within the site. These were in the vein of a self-publishing venue that provided access for parents and children to new but traditionally presented text stories.

392 Formerly Children’s Software Review, this monthly publication which is available both in print and online provides access to 7000 reviews dating back to 1999 on their website. See http://www.childrensoftware.com.
As authors’ technological knowledge and sophistication increased, so did the interactive opportunities within the stories themselves. *Chateau Meddybemp’s Pigmoose on the Loose*, Figure 6.11, offers children simple roll-over techniques to encourage engagement in its stories.

**Figure 6.11. Sam and Joe take on the job of tracking down Pigmoose**
After a bit of searching with the cursor they will find him in the barn.

Sam said, “Joe and I will come right over.”
“Don’t worry. We’ll catch that pigmoose.”

Then Sam said, “Hot dog! We have a customer. Let’s go!”

Oh, my! The pigmoose has made a very big mess. He knocked over the barbecue grill and started a fire...
...and he knocked over the windmill...
...and now he is hiding in the barn!

Mercer Mayer's *LittleCritter* features clickable animated stories and songs. Websites such as these have yet to achieve the innovation in narrative interactivity that is found on e-literature sights, but their stories are entertaining for children and they attract readers.

Public and private organizations interested in providing children with access to stories also started websites for them. In 1995, the School of Information and Library Studies (now the School of Information) at the University of Michigan, began work on *ipl – The Internet Public Library*. The children’s site at *ipl, KidSpace*, provides, among a dozen other activities, a story hour during which children can access both classic and new stories written especially for the site. Private organizations, such as the National Geographic Society, also created websites for children (*National Geographic Kids*) that feature stories. A number of stories at the National Geographic Kids site have more complex interactivity, emulating the action and adventure of video games. In what is almost a natural extension of their mandate, both public and private broadcasting companies bring websites to children as well. The Public Broadcasting System developed and acquired access to sites related to the programs on its television stations. The website, *PBS Kids*, offers links to *Arthur, Caillou, Clifford, Dragontales, Sesame Street, Zaboomafoo*, and to many more program sites where children of different ages can find stories to look at and/or read. Nickelodeon’s site for young children, *Nickjr*, promotes activities that parents and children can do together and, in *Just For Me Stories*, presents animated stories for children as one of these activities. The stories on these sites are predominantly static text and illustration, though the level of interactivity does vary. Some of the sites are exploring ways to present story in a more engaging fashion to children.

Many of the sites noted above are for children of varying ages, from preschoolers to preteens, and have a parent information component. In all of them, stories are only one of a wide range of offerings, which may include games, crafts, homework help, and newsletters. Children can make decisions both about the sites they would like to visit, as well as choose, which activities they would like to engage with. Having opportunities to participate in activities of their own choosing provides children with a sense of agency.

**6.3. Just Games**

While edutainment games changed little over ten years and children’s digital narrative in world wide web environments stayed true to print, for the most part, the video game industry did
not stand still, and both game consoles and games changed. Throughout the 1990s the industry
grew rapidly leaving other digital narrative genres behind. The remainder of this chapter
concerns itself with video games and children’s engagement with them. It is fitting to start the
discussion by mentioning two of gaming’s most prominent and well-loved characters whose
stories have evolved over the years: Mario the Plumber of *Mario Bros.* (more of a ludic game)
and Link of the role-playing game *The Legend of Zelda* (more of a narrative game).

Mario the Plumber got his start in Donkey Kong in 1981 and has become the most
recognized of all game characters. Starting life as a 2D sprite he became fully animated in the
1996 Nintendo 64 version, *Super Mario 64*. Yet, as a sprite, he is immensely successful in
handheld games where he “jumps all over the screen,” an attribute Shigeru Miyamoto, his
designer, endowed him with in his first adventure.

![Figure 6.12. Mario the Plumber](http://i10.photobucket.com/albums/a122/don_starlancer/Mario64_-_Dire_Dire_Docks.png)

Miyamoto made Mario “a middle-aged man with a strong sense of justice who is not
handsome” so that he could take on a variety of different roles in later games. Over the years
Mario has shown plucky enthusiasm in the face of danger; he has repeatedly saved Princess
Peach and the Magic Kingdom from evil villains like Bowser. Mario’s personality has been
revealed through the many games he’s been in: he is kind hearted, humble, loves pizza and pasta
(after all he is Italian), and above all he is cheerful. Children have gotten to know Mario over the
years in all his guises. They have made him run, jump, and stomp in 2D environments on
handhelds like the GameBoy and the Nintendo DS, and again in exciting 3D environments that
challenged him on every side on game consoles such as Nintendo 64, GameCube, and now the
Wii. Children have been rewarded with attaining the next challenging level when Mario has

---

306 There are other genres such as massive multiplayer online role-playing games (MMORPGs) that are ongoing and successful. The
only major MMORPG for children is *Toontown* (Disney Online). *Toontown* has the usual “evil robots invade world” story, but
enemies are fought with comedy rather than guns. This makes it a game that attracts children as well as interests their parents.
outwitted a villain or successfully traversed a complex terrain. Mario has provided engagement through interactivity by demanding skill-based manipulation of characters in challenging environments. He has provided for participation in numerous quests (all honorable). And he's always up to something new. Fortunately he's not up to teaching math or spelling, though he has shared a lot about initiative and inventiveness as well as persistence in the face of difficulties. Though Mario is an action figure (if you can consider a dumpy plumber an action figure), he has endeared himself to millions of children as a character with a big heart. He is example of action and content working together, in the vein of Sir Lancelot, but with a pipe wrench.

Figure 6.13. *Legend of Zelda*

Link, Zelda in 2D, Link playing the Ocarina in 3D

The *Legend of Zelda* is a computer role-playing game that brought the character Link to players in 1986. It is known for its complex puzzles, beautiful scenes, and its musical clues. Zelda was designed to encourage the player to be more creative. Shigeru Miyamoto, Mario's designer, wanted to make a game in which the next move was not already determined, in which players could grow. Miyamoto first envisioned the game as "a miniature garden that you can put inside your drawer," a garden in which the player could explore freely. He sees the possibility of character growth as the difference in role-playing games such as *Zelda*. Link, the main character, grows through the actions that the players take. While the game play in Mario games is straightforward arcade action, gameplay in *Zelda* is more complex. Players must find items to solve puzzles, strategize to outwit villains, and explore a large environment. As *Zelda* is a role-playing game, children take responsibility for Link in the game. They help him acquire items that will help him solve puzzles and make decisions that will overcome villains. In 1998, Link

---


402 DeMaria, *High Score: The Illustrated History of Electronic Games*.

finally became a 3D character in Zelda, Ocarina of Time, (Figure 6.13) thought to be one of the best games ever made.\footnote{404}

Though Mario and Link are now both in 3D, they are still played on handhelds in 2D. These games are very popular and it seems that the limitations of the graphics do not take away from the enjoyment of the game in such a small environment. Both SuperMario 64 and Zelda, Ocarina of Time are rated Everyone by the ESRB, and they are indeed, played by everyone from young to old.

More Game in the Play Mix

Statistics available from a range of organizations show that computers and video games soon began to stake a substantial territory in the lives of children. In 2001, The National Center for Education Statistics study (US) showed that 80.5% of 5 to 7 year olds, 90.5% 8 to 10 year olds, 92.6% of 11 to 14 year olds, and 93.4% of 15 to 17 year olds used computers. Male and female use was almost equal at 89.1 and 90.0 respectively. Of these 59% used their home computers to play games.\footnote{405} The 2001 Sixth Annual Video and Computer Report Card showed that 92% of children between 2 and 17 play video games and “more than two thirds of children ages 2-18 live in a home with a video game system.”\footnote{406} The 2004 Report Card showed the average school age children spend about 9 hours a week playing video games (boys - 13 hours, girls - 5 hours).\footnote{407} These statistics reflect the growth of video game sales from 74 million games in 1996 to 250 million games in 2004.\footnote{408}

As children spend less time with print and more time with this new media, reaching them with narratives that provide a breadth of cultural information for creating their worldview becomes increasingly valuable, increasingly so as the age at which children are being introduced to new media becomes younger. Whereas in 1987 the Jacob Neilsen study of Inigo the Cat showed children three and four had difficulty using a mouse,\footnote{409} today digital programs such as Caillou Magical Adventures (Brighter Minds), target children as young as two.\footnote{410} In 2003, the Kaiser Family Foundation conducted a study on media and very young children, Zero to Six: Electronic Media in the Lives of Infants, Toddlers and Preschoolers, which provided some

\begin{footnotesize}
\begin{enumerate}
\item DeMaria, High Score: The Illustrated History of Electronic Games.
\item Key Facts: Children and Video Games (Washington, DC: The Henry J. Kaiser Family Foundation, 2002).
\item David; Douglas Gentile; Jeremy Gieseke; Monica Walsh; Emily Chasco Walsh, Ninth Video Game Report Card (Washington: National Institute on Media and the Family, 2004).
\item Entertainment Software Association ESA, Essential Facts About the Computer and Video Game Industry (2006).
\item Walsh, Ninth Video Game Report Card; Dimitri Christakis, Michelle Garrison, A Teacher in the Living Room: Educational Media for Babies, Toddlers and Preschoolers (Washington: The Kaiser Family Foundation, 2005).
\end{enumerate}
\end{footnotesize}
startling information. “[N]early half of all children six and under [in the U.S.] have used a computer, and… 30% have played video games.” Young children are “hopping up to the computer themselves (33%), loading their own CDROMs (23%).” One of the reasons children are becoming increasingly familiar with digital technologies is the interest of governments in creating a computer literate society. Programs such as Computers for Schools (Canada) and Getting America’s Students Ready for the Twenty-First Century (U.S.) were initiated to improve technology infrastructures for children in schools and have successfully brought computers into elementary and secondary schools.412

Video games differ from print in that games aimed at teens and adults can be played, and often are, by much younger children. Unlike print literacy, game literacy, or the vocabulary necessary to “read” video games, is easily acquired.413 Once children learn how to manipulate a range of activities in a game such as SuperMario64, they have learned the basics to play any game on the market. This issue can be partially dealt with through the purchase of games which are rated by the Entertainment Software Rating Board (ESRB). However, playing video games is a social activity for children, and younger children watch and play games with their older siblings and friends. This creates the dilemma also noted in film and in television viewing – messages intended for an older audience, teens and adults, reach young children.

The E (Everyone) rating designates games for ages 6+. These games have “minimal violence, slapstick comedy, some crude language.”414 Much E software aimed at young children (3 – 5) and children (6 – 8) is edutainment and may be less interesting and engaging than other video games. Video games like Donkey Kong and SuperMario64, that have E ratings, may seem violent to adults because they consist of running, jumping, and stomping in the effort to attain a goal. Though there are video games available for children with no stomping, such as Harvest Moon and Animal Crossing, these are in the minority.

Earlier in this chapter, the success of first-shooter game Doom (1993) and its effect on the type of games being developed was mentioned. Violent action is the norm in first-person shooter games such as Doom, and as these games became the standard, parental concern with children

411 Rideout, Zero to Six
412 Computers for Schools’ Millennium Challenge was adopted by the Canadian government in 1993 and by 1995 had delivered over 250,000 computers to schools and libraries. See at http://csf-opc.ic.gc.ca. Getting America’s Students Ready for the Twenty-First Century, initiated by the Clinton/Gore administration in 1996, was projected to spend $109 billion over the five to ten year life of the project in its aim to provide every school child with access to a computer. Cynthia L. Selfe, “Technology and Literacy: A Story About the Perils of Not Paying Attention,” The Journal of the Conference on College Composition and Communication 50.3 (1999). See at http://www.zuni.k12.nm.us/las/TechTTLCTOC.htm.
413 Fromme, “Computer Games as a Part of Children’s Culture.”
playing them increased.\textsuperscript{415} While new computer technology had brought with it a great promise for learning and enhancing creativity, with the evolution of the medium, hopes of self-esteem and self-empowerment were replaced with concerns about memory loss and anti-social behaviour in the 80s, and then with charges of addiction, violence, and aggression in the 90s.\textsuperscript{416}

An offshoot of arcade games, video games never had the respectability of an association with learning that computers had. Born with the legacy of entertainment rather than learning (and the taint of pin-ball parlours), criticism of games was fueled by the entertainment industry’s own advertising. One Infocom headline reads, “I was a teenage zombie,” and shows a teenager clutching a joystick with his eyes crossed and his mouth hanging open (Figure 6.14). Only switching from a game console to a computer saved John from “living death.”\textsuperscript{417}

Figure 6.14. Infocom’s advertising

When anxieties about “mindless addiction” first arose in the early 80s, they were countered by opinions of such academics as Seymour Papert and Sherry Turkle. In her book \textit{The Second Self}, Turkle identified the complexity of skills children were learning through their interaction with computers and video games.\textsuperscript{418} More recently video games are being championed by academic James Gee and game developer Mark Prensky, who advocate the benefits children gain from playing games. These include the ability to communicate, share, buy and sell, exchange, coordinate, evaluate, search, analyze, report, and quite a few others. Prensky points out that children aren’t only using technology differently, they are also approaching how they tackle their

\footnotesize
\textsuperscript{415} Wartella, "Children and Computers: New Technology -- Old Concerns.", \textit{Key Facts: Children and Video Games}.


\textsuperscript{417} Advertising from this era can be found at \url{http://www.pelikonepeijoonit.net/egscans.html}. This ad can be seen at \url{http://netti.nic.fi/~pelle/pkp1old19infocom.jpg}. DeMaria, \textit{High Score: The Illustrated History of Electronic Games}. p. 116.

day-to-day activities differently because of it. He says that, above all, children don’t want to be bored, they want to be engaged.\(^{419}\)

Many public interest groups feel that the interactivity inherent in games that makes them such a potent educational tool, also teaches violent and antisocial behaviour. A number of children’s interest groups have chosen to tackle violence in games by lobbying to have them regulated. In April 2003, MAVIA (Mothers against Violence in America) successfully lobbied Washington State to ban sales of the violent game *Grand Theft Auto* to children under 17. Scientific studies have been used to substantiate beliefs that aggressive behaviour in children increases when they play violent video games.\(^{420}\)

Academic Henry Jenkins, while he does not defend the violence in games, warns that the model of thinking this follows - ‘stimulus/response, not conscious reflection’ - is simplistic. In his talk, *The war between “effects” and meaning: rethinking the video game violence debate*, he suggests that the absence or presence of violence is not the issue that needs to be addressed. At issue is the meaning that is made of the violence. He notes that stories have always been used by cultures to make sense of violence (i.e. Brother’s Grimm), and that the need that exists is to find ways to develop games that encourage “ethical reflection.”\(^{421}\) In speaking about the cultural value that stories can bring to a medium, Jenkins affirms the need for stories in games.

**Loss of schema**

Children’s preferences and experiences of narrative change with age in the digital world as they do in the print world. Very young children enjoy much the same things in computer and video games that they do in print books – they like to do the same thing over and over, they like to have the same story read again and again. The events in the story become familiar to them, the actions relating to hearing, or seeing, or playing the story become familiar, and they are comfortable with that familiarity. They go through a process of assimilating the information in the story, and then accommodate it to what they know already.\(^{422}\) In doing so they are creating a schema, that is, they are organizing the events so that they can remember them and use them as a reference point later. *Just Grandma and Me* shows that grandma will always help, that she is


\(^{420}\) David Grossman, a popular proponents of what has been called the “The Media Violence Myth,” uses statistics selectively to substantiate his stance. He claims, for instance, “a strong relationship between ‘early violence viewing and later criminality’ [when] his conclusion is based on only three cases out of 145.” Richard Rhodes, “The Media Violence Myth,” *Rolling Stone* (2000). Gee, *What Video Games Have to Teach Us About Learning and Literacy*.


someone to have fun with, and that she will take care of you when you are tired. Print books offer a wide range of narrative schema that reflect life situations for children to experience and upon which they can build their understanding of the world. As children become older they are exposed to more narrative schemata, as the range of life experiences represented in books for adolescents and young adults is more extensive than it is for younger readers. In addition, the books are often harder to read: the language and the concepts are more complex. Children are constantly constructing a sense of self through stories, and this complexity in the narrative (which reflects the complexity of adolescent’s lives) provides a reference point for them. Print books also offer a wide range of narrative genres in which schema figure – travel stories, fantasy stories, biographies, science fiction, and stories about everyday life among others. At this point narrative games do not offer such a range.

The interest in presenting children’s stories digitally that was demonstrated by companies such as Discis and Broderbund during the early 1990s (The Tale of Benjamin Bunny, The Berenstain Bears), dwindled. Currently many games for children are based on stories adapted or written for movies that have proven to be successful in the marketplace (101 Dalmations, Nemo, Shrek). These stories are adapted to convey action. In some cases, little story is left. The study, Narrative and Game: Intersections, discusses how game developers take a story such as Harry Potter and the Chamber of Secrets, and rather than developing a narrative game around its story characteristics, take a game format that is familiar to audiences, and drape story sequences that best support action over this format. Video games for older children such as Half-Life do provide complex environments and action within an interesting story. Such games are compelling and immersive and require significant manual and mental agility, but they are of a specific genre, and do not offer the range of narrative schemata that is found in older and more evolved media, such as print.

One of the reasons is that video game industry is still at a very young stage in its development. In the liminal stages of print (1500) the repertoire of schemata used for children’s books was also very limited: courtesy books, ABCs, and primers. Chapter Five shows that to increase the range of texts available to them during those early years, children had to appropriate adults’ literature such as Aesop’s Fables and Robinson Crusoe. When publishers began to market

---

424 Engel, The Stories Children Tell.
426 Madej, Narrative and Games: Intersections I.
books specifically for children in the eighteenth century, the repertoire of schemata available to them began to expand. It has continued to expand until today it is not likely that there is a human (or other) situation print has not covered in some fashion. This did take five hundred years.

Another reason is that traditional narrative structure has been held up as the norm for narrative development in games. Roberta Williams reflected a common opinion about narrative structure when she spoke about *Mystery House* (quoted earlier in this chapter):

*I wanted something with a good story, but it also had to be a game. Stories tend to be linear – beginning, middle, climax – and I needed to expand into ‘What if they want to do this? Or that?’ My main inspirations were Agatha Christie’s Ten Little Indians and the board game Clue. I used the idea of Clue to pull me out of linear thinking.*

This notion, that narrative must be structured linearly and within a plot, has supported many years of discussion (and heated debate) between narrativists and ludologists (narrative and game scholars), about whether narrative and games are suitable for each other. There is agreement that classic linear plot, with its causal sequence of events and time, is not supported well by the game medium because interactivity interferes with causal sequence, with linearity, and with temporality. Media scholar Henry Jenkins suggests that narrative game development suffers because of the blind spot caused by a belief in traditional narrative structure when other kinds of narrative exist, and that game designers would do well not to be preoccupied with its conventions. In addition, he comments, “the discussion operates with too limited an understanding of narration, focusing more on the activities and aspirations of the storyteller and too little on the process of narrative comprehension.” Jenkins supports the idea that a limiting view of narrative is currently used to consider how narrative can work in a digital environment, but that other more compatible narrative forms exist, and that understanding narrative process will help in understanding more fully the interplay between narrative and games.

In children’s digital environments there is, on the one hand, hypertext which presents print stories in a digital environment in traditional print ways. A range of diversity in schemata exists in children’s hypertext, but the presentation is not as dynamic as in games. There is even a

---

428 Gonzalo Frasca tells us that the discussion is a result of a misunderstanding in *Ludologists love stories too: notes from a debate that never took place*. See Chapter Four, Traditional Narrative Structure for more discussion on this topic.
question about whether text presentations on screen are truly digital narrative. On the other hand, there is the video game genre which provides exciting interactive engagement, but offers a narrow range of narrative schema. The life experience provided by a wide range of narrative schemata is the chief loss to children when they go from a print to a video game narrative environment. The importance narrative has as a “form by which human experience is made meaningful,” and the promise of the new media “to shape the spectrum of narrative expression,” goes largely unfulfilled in what is currently available for children.

In *Weaving Charlotte’s Web*, Ann Terry says “The key to providing children with a firm literary foundation for writing their own stories is an obvious one: Provide children with a wealth of rich book experiences.” The same is true for digital literature. If there are few good hypermedia stories for children written by children’s authors, and children continue to be exposed to digital books, games, and simulations of limited quality, their wealth of narrative experience at this point can only come from other media — print, film, and television.

### 6.4. Characteristics of Narrative Game Experience

**Current observations**

At *Home with Games*, an ethnographic observation of my three children in their home environment, has been ongoing since January 2000. Nicola, Michael, and Daniel were 11, 8, and 6 when the study began, and are now 18, 15, and 13. Details of the study methodology have been discussed in Chapter Two under Studies, while descriptions of the home environment, resources, and a narrative that reflects the observation notes, are found in Appendix A. The observation provides a view of children’s experience with games as they play them, day to day, in their own home. It shows patterns of behaviour that can be considered characteristic of this experience, and which can then be considered in light of the media theory introduced in Chapter One. As mentioned in Chapter Two, the observation looks first to the children and their experience of games, and then to theory and how it might be reflected in children’s activities, for these patterns.

This observation finds that when children are very young, they most often play games together with their parents. As they grow older, children will play games alone, but they often

---

Marie-Laure Ryan defines a truly digital text as one which “cannot be transferred into the print medium without significant loss. In adult literature we have experimenters in the forefront of the field such as Marjorie Luesebrink and Carolyn Guertin, and organizations such as the Electronic Literature Association, to support exchange of ideas. Though the children’s digital narrative field has grown to include a very large number of websites such experimentation is scarce.” Marie-Laure Ryan, *Narrative across Media: The Languages of Storytelling* (Lincoln and London: University of Nebraska Press, 2004).


Murray, *Hamlet on the Holodeck*.

want to have friends to play with, even when games are only one player and friends are relegated to observer status. When children have moved to a new game level successfully, or have been able to give their characters special powers or characteristics, they want to share the news and the excitement. If friends or siblings are not around, they share with parents, both as they play, and during moments when the family is together, such as mealtimes.

The observation found that young children (ages two to three) gravitated to digital stories that are game like (ludic), such as *Just Grandma and Me*, more than they did to ones which are more like print stories (narrative), such as *Benjamin Bunny*. As they became older (ages four to five), and were exposed to a greater variety of games, they enjoyed both ludic and narrative games. Ludic games engaged them more intensely: it was difficult to interrupt them at the moment when they were playing a game such as *Fury of the Furries*. In addition, if they did not achieve the set goal, such as getting a ball through a series of tunnels, they would be considerably distressed. When they played more narrative games such as *Just Grandma and Me*, or edutainment games, such as *Where in the World is Carmen Sandiego*, the same type of intense preoccupation or engagement did not occur. They could pull out of the play activity more easily. Winnicott suggests in his description of play that this involvement and the difficulty in leaving the game, is a characteristic of play for young children.

The observation found that children first picked games to play that were associated with characters they were familiar with from other media. Their favorite stories were often those that had characters like Tigger, the Tonka trucks, and Mercer Meyer’s Critter. This holds true as they got older and chose games with Pokemon, Superman, Harry Potter, and Luke Skywalker as lead characters. They also picked games that they had played and become familiar with at friends’ homes.

The games the children played when they were young offered them a range of multimodal activities, not only reading, making puzzles, and singing songs. Games such as *Richard Scarry’s Busytown*, were animated representations of the print books that children poured over both with parents and by themselves. Children could now try out all the activities that they had read about in books. As they got older they encountered more complex narrative games. Narrative and action was intertwined, and children needed to make their characters run, jump, and fly through many different scenes to achieve their goals. When playing sports games they experienced the physical activity of tennis, golf, and soccer vicariously. These on-screen activities became more real physically with the introduction of the Wii.
One of the most enjoyable experiences that children have is the opportunity to play within a diverse range of environments, in both familiar and unusual spaces. They can be in Richard Scarry’s *Busytown*, they can join the Dalmations running through ramshackle halls of a derelict house, they can swing from building to building as Spiderman, and they can fly through the air in a Quidditch Stadium as Harry Potter on his way to catch the Golden Snitch. In games such as *SuperMario64*, they play in three-dimensional spaces that are outstanding in their diversity and in their complexity. They learn to maneuver through these spaces with amazing agility. Once adept, they move through stories in narrative games with finesse, knowing how to get to the next scene, and doing so adroitly.

The observation showed that children gain an ability to accomplish their goals from their first attempts at making characters move left, right, or forward. Young children’s games let them maneuver their favourite characters, such as *Winnie the Pooh*, through different story scenes. Role-playing games for older children let them individualize their characters by acquiring characteristics, tools, or weapons for them. This way children control their characters, and the story, in more significant ways than when they moved Pooh around. In simulation games like Nintendogs, children create their own characters and make up their own stories. Children are adept at manipulating and controlling not only game actions, but also their characters and the story events that surround these characters, in any digital game system, regardless of its simplicity or complexity.

Game characteristics

Chapter One discusses theories from new media scholars that have provided reference points for looking at children’s game experience. The theoretical work of Jay Bolter, Henry Jenkins, Lev Manovich, Eric Zimmerman, and in particular Janet Murray and Espen Aarseth, have been among those that have influenced the viewpoint brought to my observations.

Children’s experience of games has not been studied as part of media theorists’ work, and there are no taxonomies which speak directly to their experience. This section considers which characteristics or properties theorists discuss that best suit the patterns in children’s game experience identified in the findings from my home observation. Janet Murray in *Hamlet on the Holodeck* presents a set of intrinsic properties and pleasures she attributes to digital environments, many of which resonate when considering them in light of children’s experience. She presents four properties. Digital environments are procedural: they work within a set of rules that their author has defined. They are participatory: readers or viewers (Murray uses the word
“interactors”) interact or participate actively in the digital environment. They are spatial: they offer a space within which participants navigate. They are encyclopedic: they store very large amounts of information. Murray presents three pleasures. Digital environments can be immersive: participants are submerged in a pleasurable story world. They can build agency: participants gain a sense of autonomy through interaction with the environment. They can be transformative: participants can change their game characters and the space they inhabit, participants can also change themselves.434

Of these properties and pleasures, two are specific to the game environment and are not suitable for this taxonomy, four in particular are descriptive of children’s experience, and one requires some refinement for our use. Children enjoy interactivity and a space within which they can play in the game environment (properties: participatory, spatial). Children also enjoy a sense of autonomy and opportunity for transformation both of game characters and of themselves (pleasures: agency, transformation). The theorists Jenkins, Manovitch, and Zimmerman, consider spatiality an intrinsic property of games,435 and Louchart and Aylett consider agency an important aspect of narrative games.436

The pleasure of immersion, with its notion of suspension of disbelief, cannot be applied to children, as their beliefs at a young age are a mixture of reality and their view of reality. They do not need to suspend disbelief, as they do not believe as adults do.437 Salen and Zimmerman suggest the “idea of being transported into an illusory simulated reality” through a media experience is a fallacy and that engagement occurs through the play activity.438 Douglas and Hargadon have suggested that the pleasures of immersion and engagement are linked, and that engagement leads to immersion. Engagement includes an involvement with the game, in which moving in and out of the game is part of the play activity.439 It is engagement rather than immersion that describes best the preoccupation which children have with games.

434 Murray, Hamlet on the Holodeck.
437 Salen and Zimmerman suggest Huizinga’s Magic Circle as a space where the rules of the game meet the culture of the player and play occurs. This is much like the space Winnicott suggests children create when they play, a space that they create of themselves and the world around them. Winnicott tells us that a child gathers phenomena from our external reality, then accommodates this reality to their own personal understanding. When a child plays s/he is in a psychic state which is neither wholly within the internal psyche, nor wholly within the external world, but in a shared space. A child brings this version of reality (which may be very dreamlike, or wishful thinking) into the shared space within which they play. Winnicott, Playing and Reality. p. 51-52
438 Salen, Rules of Play: Game Design Fundamentals.
In addition to these five characteristics, children's experience with games exhibits patterns of behaviour that are social and multimodal. The following section describes in more detail activities that define these seven characteristics: social, interactive, engaging, multimodal, spatial, and affording agency and transformation.

**Social interaction**

Playing console games has always been promoted as a social activity that spans generations. Early advertising shows children playing games together, playing games with their parents, and with their grandparents (Figure 6.15). Games attract others to participate. In the case study *Books and Computers: A Literacy Observation*, when Michael, my oldest son, started to read the animated story *Just Grandma and Me*, his brother was attracted by the activity on screen, came over and the two children proceeded to read, but in particular, play the game together.

**Figure 6.15. Television advertising from the 1980s**

Atari's 1986 advertisement has friends playing a 2600jr. In 1983 Coleco's kids think perhaps Smurf is too exciting for dad. Atari wants to know if children, parents, and grandparents have had "their game today" in 1980.440

Many games are multiplayer, but even when playing single player games, children are often part of a group in which they maintain social interaction by giving each other advice or taking turns playing.441 At our house and at the homes of my children's friends, games are included as part of the activity repertoire when they get together. Much as they kick a real soccer ball about they will play a soccer video game. In one-player games, children like to watch each other play and/or take turns and discuss, boast about, or cheer the play on. Children play narrative adventure games together as these have characters that can be discussed and cheered on. They do play games when they are alone but, when it is possible to do so, they include others in their play.442

441 Jenkins, *The War between "Effects" and Meanings.*
Today’s Nintendo ads for their Wii (Figure 6.16) show games as an activity for friends and family members much as ads did twenty years ago. With developing technologies such as large screen HD display adding to the engagement potential, video gaming continues to be a social event, between friends and between generations.

**Figure 6.16. The Wii advertising today’s interactivity**

Nintendo shows friendly competition between peers in their ads. 443

---

**Interaction**

In addition to showing social interaction, these ads show interaction between players and the game. Media theorist Seymour Papert suggests interactivity is a function of the responsiveness of the media to children’s actions. 444 Games are programmed to respond and an exchange occurs between game and player. Role-playing games and simulation games give children opportunities to effect what happens in the game more personally, increasing the extent of the interactivity. 445 Players interact with a game through a set of devices. The interface consists of a controller either hardwired or with a remote connection to a console that is attached to a television or computer screen (Figure 6.17). The controller is the threshold object that takes you in and out of the game. 446 Although the configuration of controllers over the years changed, these changes did not contribute to ways story could be told until the Wii.

**Figure 6.17. The basic game playing system from Coleco and Atari**447

---

443 Ads found at home.btconnect.com/. /wii-system.html and www.mpdailyfix.com/images/wii.bmp
444 Papert, *Mindsstorms.*
446 Murray, *Hamlet on the Holodeck.*
Controllers originally ranged from a simple toggle to *Coleco’s Super Action Controller* with four trigger buttons on the pistol-like grip that could control up to four characters, twelve buttons in a changeable numeric keypad matrix on top, a one-dimensional “speed roller” wheel near the back, and a joystick (Figure 6.18). The complexity of this super controller suggests that, at the time, designers thought more options equated to better game play. Since these early days, the design of controllers has become more streamlined. The three major systems’ controllers are all similar. The functions make sprites or figures jump, turn, kick, move left, right, ahead, or back and change the view from first-person to omniscient. Games are designed to have one to four players, and with extensions eight, and in some games the screen is split to show individual players.

**Figure 6.18. Controllers circa 1980s and today**
Nintendo’s toggle controller, NES controller with more buttons, Coleco’s Super Action Controller, today’s GameCube controller.448

---

Early in the evolution of games, developers encouraged engagement through interfaces that emulated a real experience. Companies wanted to provide a range of actions and, using an arcade model, added driving wheels, pistols, and rifles to the basic controller (Figure 6.19). The *Marksman* system advertises itself for six video games – two pistol games, target and skeet as well as tennis, hockey, handball and jai alai.

**Figure 6.19. The Coleco Telstar Arcade Controller (1976) and their Marksman (1980)**449

---

449 Images at http://www.maniacworld.com/game_console_history/Colecovision.htm
While guns (no longer as realistic as they once were) and wheels are still available, more recent virtual interfaces in this vein include the programs *Dance Dance Revolution*, which has a dance mat, *Donkey Konga*, which has a drum, and *Guitar Hero*, which has a guitar. These provide a more engaging play experience through interaction paralleling the real motion more than does pressing buttons on a controller. Another new device, the Eye Toy, puts the player literally into the game. The eye toy takes a picture of the player’s face and puts it in the play space on the screen. It then films the player, and puts his/her body actions on the screen along with the face. Players can dance, kung fu, wash windows, or play soccer. These devices are not used in games with any level of narrative (though they could be), with the exception of *Donkey Kong Jungle Beat*. This game uses the beat of the kongas to move players through the game action in typical Donkey Kong scenarios.

Handheld games proved the perfect interface device for child gamers. Handhelds are small and easily transportable. They are capable of providing all the interactive entertainment available on large consoles. Children can use them anywhere, from the sofa to the car seat, a large part of their charm for both children and parents. When introduced, Nintendo’s GameBoy showed that content trumped graphics in holding player interest. Its simple screen with four grays (no color), and its “killer app,” the game *Tetris*, carried GameBoy to enormous sales. None of the other handhelds of its time, all of which had more sophisticated graphics, survived. The next generation, the Nintendo DS, added more interactive capabilities to the handheld by providing a touch screen and stylus, adding a new mode to the physical interaction as well as more options in actions within the game. A second screen, on which linked games could be played, added to children’s opportunities to make choices.

Early on, when narrative adventure games were played on text-only on computers, players used the keyboard to type in play or command information. When text displays changed to animated scenes, and narrative adventures became available both on purpose-made consoles and computers, keys were assigned certain actions as were function buttons in console games. As identified above, these actions are limited to run, jump, turn, and viewpoint. Douglas and Hargadon suggest that one of the reasons some narrative schemata are difficult to include in games is because of the limited type of action available through a controller. Designers have

---

450 GameBoy had 500 million sales, more than any other console in history. DeMaria, *High Score: The Illustrated History of Electronic Games*. 

155
used only a few ways to add depth or purpose to action (speech bubbles, text dialogue, game artifacts such as heart shaped jewels). Figure 6.21 shows current video game controllers.

Hand controllers changed the interaction between player and the action on screen little until the introduction of the Wii. Move the Wii controller and the player on screen emulates the move (See Figure 6.17). Wii’s controller gives players a closer physical relation to the action on the screen so they can identify with it more intimately. With the Wii the opportunity to act the player in the game space comes to narrative games. In Trauma Center: Second Opinion, the player takes on the role of Derek Stiles, a doctor at Hope Hospital and proceeds to save lives because of his Healing Touch. The player acts the surgeon. Being able to perform as Dr. Stiles adds to the intimate sense of being part of the story through events that are “really” happening. The player learns through his or her “surgeries” what it takes to be Dr. Stiles and, after having gained skills, is able to handle future emergencies in new ways. The player takes on the traits of the game character. At the same time the player then jumps out of the character and must control the entire story movement. The back and forth movement between the personal and the story world can lead to a better understanding of the nature of the character. This is emergent narrative, with the storyline changing in response to the actions of the player, as in an improvisational drama. By changing the quality of interaction the Wii adds to the engagement in games.

Douglas and Hargadon suggest that writing narrative for games is driven by the developers’ view that only action keeps a user engaged; the resulting narrative is limited and contained by the action. Many children’s video games are based on books or movies, such as Lilo and Stitch (movie) and Harry Potter and the Chamber of Secrets (book and movie). Games based on movies or books use portions of the narrative that most quickly sets the scene for action and is most suitable for carrying through typical game activities. We can see the difference in how a print narrative such as Harry Potter and the Chamber of Secrets is treated in both the movie and the video game versions. The movie follows the book narrative closely; the video game uses only the part that is most useful for commonplace gaming activities. The story is reshaped for gaming. In this form it often lacks the continuity of the original. This selectivity is true of many games: only narrative that generates action is used. The narrative element, often promoted as a key feature of the game, is seen by those looking for a conventional story as limited or “choppy.”

453 Louchart, "Unscripted Narrative for Affectionally Driven Characters."
Internet sites are also a venue for children’s digital narrative. Most internet sites that present children’s stories are interactive in a way that does not affect the narrative; interaction is incidental to the site. Children’s digital narrative is slowly moving towards interactivity that makes a difference to the story. For instance, the National Geographic Society website presents *The Underground Railway*, a story in which children can follow Harriet Tubman as she escapes slavery by following the Underground Railway to Canada. Choices are provided that make a difference to how a child moves through the story and perceives the information.455

**Engagement**

In *Hamlet on the Holodeck*, Janet Murray describes an interaction with a game character, “When my son pauses the action on the Escape from Mars maze game, the Tasmanian devil glares out from the screen and begins to tap his foot and wave impatiently... it is almost as if the programmer within the system is waving at us, but doing so in a manner that deepens rather than disrupts the immersive world.”456 The Tasmanian devil is asking the player to participate in the game world; s/he participates through interaction.

Salen and Zimmerman point out that players become engaged, not immersed because, creating a “representation completely indistinguishable from lived reality” is not what occurs. Children are completely engrossed in a game through engagement in the play itself. It is irrelevant that the world is not real, as they create their own world.457 Children are aware they are playing yet are participating fully in that play. Edith Ackerman, in looking at assimilation and accommodation of situations, points out that the movement in and out of engagement is important as it provides momentary breaks for the accommodation of the events in the game into our own reality.458 Engagement can lead to a state of flow. Mihaly Csikszentmihalyi identifies flow as that focused and engaged state when a person feels s/he is in control of her/his actions and achieves an ongoing sense of accomplishment.459

Children participate in the game world by either controlling a player, or becoming a player. The first often takes simple action: making a “sprite jump,” the second takes more complex action: creating a character with numerous skills which they can use to save the world. The more interactive the gameplay, the more actively children construct their world, and the more they

---

455 http://www.nationalgeographic.com/railroad/
456 Murray, *Hamlet on the Holodeck*.
457 Winnicott, *Playing and Reality*.
458 Ackermann, "Perspective Taking and Object Construction."
engage with it. The new Wii has brought a shift in player/game dynamics. The interface of the screen is blurred as sensors in the Wii controller put players' actions directly on screen. This provides for a higher intensity of interactivity through more realistic physical involvement with the characters in the story and builds engagement with the game. The range of the experiences offered for a player could be extended to provide context that focuses on meaning as well as on effects. Figure 6.20 shows the point of view of game (action on screen) with a regular controller – the player playing the characters in the game, and the point of view of game with the Wii – the player being a part of the game.

Figure 6.20. Game screen from SuperMario64 and advertisement for Wii

Multimodality

Edutainment video games, such as *Cat in the Hat*, offer a wide range of activities in addition to a read-along story that children. There are art activities that include coloring, different types of puzzles to solve, and a variety of games to play. On-line story sites, such as Mercer Mayer's *Little Critter.com* also present these activities to children. Mayer actively reaches out to children from this website and engages them in sing-alongs, animation fun, and storytime videos. Though children are using a mouse or a keyboard to work within a digital space, they can sing along, make postcards that they can print out, or make puzzles, and do so in the company of their story character friends. In simulation games such as *Animal Crossing*, children use their controllers to complete activities that range from planting flowers to gathering and selling apples.

In addition to offering children different ways to play within the virtual world, games offer children different modalities outside the virtual world with which to interact. Physical activity is encouraged by tangible interfaces such as dance mats, drums, and guitars. Software like the Eye Toy positions a player within the game by video taping their actions and showing it on screen in real time. The new Wii controller adds to the range of physical movements that give players control of the game action. Previously most external activities consisted of repetitive action, such

---


361 Jenkins. The War between "Effects" and Meanings.
as beating a drum. With the Wii, players use a range of natural motions to control action in stories such as *Trauma Center*.

**Space and its artifacts**

Digital environments consist of space through which players navigate. In hypertext, this navigation takes place between nodes. Children click to move to a new page or a new image. In text-only games, players had to imagine the space in which they were playing, visualizing it from text on the screen. In 2D console and adventure games, the play environment is a grid on which the players move about. With 3D environments games moved to more expansive game space that is represented in many forms.\(^{462}\)

Henry Jenkins says, “Game designers don’t simply tell stories; they design worlds and sculpt spaces.”\(^{463}\) He speaks here about space not only as a place but also a place inhabited by artifacts with meaning: “Game designers use spatial elements to set the initial terms for the player’s experiences. Information essential to the story is embedded in objects such as books, carved runes or weapons. Artifacts such as jewels may embody friendship or rivalries or may become magical sources of the player’s power.”\(^{464}\) Narrative artifacts are embedded in the game to be found and used during play. Players can increase their “life span” as well as gain information or weapons from artifacts. In Figure 6.21, Mario must traverse a difficult space to attain a star.\(^{465}\)

**Figure 6.21. Mario in space**

By bringing the play space out to the player’s real space, the Wii makes a meaningful extension to game space. The Wii allows players to act the part and be more intimate with the

---

\(^{462}\) Murray, *Hamlet on the Holodeck: Salen, Rules of Play: Game Design Fundamentals*. This development is similar to the development of perspective in art. Once 3D perspective was discovered painting included all subjects under the sun.

\(^{463}\) Jenkins, “Game Design as Narrative Architecture.”


character in the game, providing, as did the first paper doll in the 1790s, a way to become more involved with the story.

**Agency and transformation**

Engagement in games requires an effort on the part of children. They must participate, choose, and act. To engage with the narrative in narrative games, children must learn about the characters and understand the space in order to figure out how to get through the story. Espen Aarseth expresses the view of games which is closest to young children’s narrative when he situates games within *ergodic* literature: literature that is open and dynamic and which requires the reader to work to access both the text and the story it tells. Children have responsibilities in gaming. They must make choices that affect outcomes as they navigate their way through the game. In embedded narrative games such as *SuperMario64*, their choices affect the path along which the story proceeds and whether the character lives or dies (for the moment). In emergent simulation games like *Animal Crossing*, their actions change the storyline. Children take the elements offered in the game and make the choices that create the experience. Unlike many other situations, games offer children a space in which they can make decisions that have an effect on the environment. In our adult world, where children are constantly told what to do and provided with little opportunity to make decisions, the opportunities for making decisions in play situations empower them. They know they can act and things will happen; they gain a sense of being capable, a sense of agency.

All games provide some sense of agency because they offer opportunities for children to make their own decisions. They reward good decisions with a pleasurable (for the most part) activity.

Role-playing and simulation games offer perhaps the greatest opportunity for players to effect change. When children are playing a narrative game like *Zelda*, they go through the process of changing the character Link by giving him attributes of strength and skill. They can change these attributes at points throughout the game, and the decision to do so is theirs. They are transforming Link into the hero they think he should be. When they choose to play as a character in a role playing game, they become performers, taking on the attributes of the character themselves. In playing a character, they take on the skills necessary to achieve their goal, in much the same way as when they are five, put on their Batman Cape, and are transformed into the

---

467 Murray, *Hamlet on the Holodeck: Geo, What Video Games Have to Teach Us About Learning and Literacy;* Preissky, *Digital Game-Based Learning*.

160
caped crusader with all his powers. Children can safely experiment with different approaches to solving problems and with displaying emotion under the guise of playacting.

Figure 6.22 provides us with the list of the game characteristics discussed along with a brief description.

**Figure 6.22. Characteristics of children’s game experience**

- **social**, children enjoy a range of social interactions with friends, siblings, and an assortment of adults (parents, grandparents, even teachers)
- **interactive**, children interact with narrative games through both a hardware and software interface
- **engaging**, children are captivated by the action in games
- **multimodal**, children use different modalities embedded in the game play
- **spatial**, children move through space to create their story and use artifacts to build up their world.
- **providing agency**, children have the power to act on their decisions in games
- **transformative**, children create characters in games and transform themselves into game characters

**Summary**

This chapter begins with adult digital narrative because... *in the beginning*... that’s all there was. Narrative had two roads open to it in the first decade after computers became more than computational engines (1970s): hypertext and eliterature in computer environments, and game narratives for computer and video game environments. Children’s narrative had an encouraging start with publishers bringing out traditional stories in new CDROM formats. With the difficulties of technology to cope with, authors, for the most part, left narratives in games up to educational publishers and game designers. Educational publishers quickly took advantage of traditional and contemporary classics to present packaged learning to parents. Game designers at first experimented with a range of content, but, by the early 1990s, the “first-person shooter” game had shown its drawing power, and their use of a range of story content became more limited. Though improved technology has resulted in better graphics, little has been done for gameplay and narrative. Recently the Wii has blurred the separation between player and action on screen. It offers possibilities for adding to the way players interact with narratives. To this date (late 2007) children play narrative games with arcade action, role-playing, and life
simulations. Children’s narrative game play displays characteristics that have been constant since console games were first introduced in the 1990s.
Chapter 7. Connecting Narrative and Game

This chapter provides a synopsis of events in the history of children’s print and game narrative experience and summarizes the characteristics exhibited by these experiences. It then provides concluding remarks.

Historically, this dissertation begins with Homerian epics of about 800 BCE. It ends with the most recent development in video gaming, the Wii. What justifies such a historical timeline and a shift in disciplines from literature to gaming? What do these two have in common?

Both have to do with people representing themselves and their culture through story. Both have to do with passing these stories on through media that were prevalent at the time. This dissertation has taken as its focus children’s story experience in print and games. Its purpose is to show the importance of connecting the two.

It is understandable that in Homerian times stories used rhyme and cadence as aids to remembering. In an oral culture, a bard recited the epic stories that his audience called for. Each subsequent era saw the form of stories undergo shifts and moves that reflected different way of thinking. A culture of reading was already in place when the printing press introduced mass print production. It fed the interests of a population already desirous of stories. In the fifty years after Gutenberg’s invention, eight million books had been printed, “more than all the scribes of Europe had produced since Constantine founded his city in A.D. 330.” Rhyme and cadence were no longer necessary, and “the collective memory was transformed,” as an explosion of print fed the literate, and whetted the appetites of the illiterate, so that learning to read became paramount in importance. Unlike their parents, children did not have the same urgency to become literate. A measure of pleasure was found to be a remarkable inducement for encouraging literacy, and became the ideology still driving education and publishing today. Books became more entertaining; the literacy experience began to include material objects such as movables. Reading our culture’s stories became a truly hands-on, interactive experience.

With the growth of literary criticism, and the need for schools to have standardized formats, literary structure was concretized as the convenient narrative arc. This structure, which had been rediscovered by Freytag, and augmented with a climactic element, found its perfect form in the Conan Doyle mysteries of the time. Other literary structures continued to evolve and maintain a strong presence in writing throughout the twentieth century, despite the educational system’s adoption of narrative arc and climactic plot as its norm. Children younger than school age were

---

470 Ibid. p. 66.
unaware they were suppose to see narrative as a linear, sequential, temporal, and climactic plot. They benefited from children’s authors’ disregard of formal structure. Children learned to love story by playing with it: by singing it, tossing it in the air, coloring it, pretending to be in it, and by listening to the same bits, and looking at the same pictures, a hundred times.

Ah, but the story moves through genres... a hop and a skip and its in film, then television, video, and finally, on the express train of video games. Did it make it whole through these transitions? Or like Ron, Harry Potter’s friend, did it get “splinched” when it “apparated” into a new media environment? Stories had a good start in the digital world with The Voyager Company bringing new ideas to book presentation on CDROM. As the video game industry became a behemoth, it shouldered smaller genres out of the way. To find a niche for themselves, story publishers moved to edutainment. In doing so, they subverted stories to new purposes – teaching math, science, and writing. On the web, children’s narrative remained mainly true to its print text heritage; it has not yet attained the creative approach of adult literature. The video game industry had the potential to make story engaging and pleasurable in the new paradigm of digital environments. The move towards the first-person shooter as a predominant genre, and the reliance on the familiar schemata of arcade-action or a hunt-quest theme, left little to explore in a story. Action adventure and fantasy now predominate while other story themes are lost to this genre. Tendencies to violent action, and other anti-social behaviour, taints the stories imbedded in many games. One of the reasons for the loss of variety is the assumption that stories are based on traditional narrative structure, and the only way games can accommodate this structure is in limited inflexible ways. If we see traditional narrative for what it is, a fairly recent upstart, and if we look at young children’s experience of story before the schools channel and structure it – when stories are as much activities as they are text (like games) – perhaps we can find characteristics of story experience that can be applied to making better games.

7.1. Research Analysis

At the beginning of this dissertation I presented the question that guides this research: what are the characteristics of early narrative print experience that help create children’s perception of narrative and that are shared with and inform digital game experience? Chapter Five and Six provide a set of narrative practices and a set of game characteristics, respectively, that we will juxtapose in this concluding chapter. Before we do so, it is useful to summarize the process or research that has brought us to this point.

472 In J.K. Rowling’s The Half-Blood Prince students at Hogwarts learn to apparate and disapparate. Stories abound about students who lost pieces of themselves as they moved into a new environment. Harry’s friend Ron, is particularly dismal at this skill and, in one attempt, leaves a finger behind.
The linkage between young children’s print narrative experience and their contemporary game experience had not previously been considered. To arrive at a set of characteristics that reflect the patterns of young children’s encounters with print and games, my research has explored a wide range of humanistic and empirical literature. I have also conducted participant studies during which I observed children’s experience. Though studies on children’s narrative experience exist, these are based in the traditional narrative values of adults. Non-traditional and childist perspectives, for both these issues, needed to be considered as well.

My literature review has explored both the history of children’s print and digital experience, and theories of child development and new media effects. I have relied mainly on qualitative research methods within a feminist and naturalistic paradigm to design my studies. Qualitative methods provide validation for the variations and ambiguities of the daily experience. A feminist/naturalistic paradigm lends itself to exploring the issue of children’s print and game experience from the child’s point of view and in a natural environment. It does not privilege the predominant, traditional understandings of these experiences; nor does it reject them.

The primary narrative study observed children in two venues, a pre-school and a kindergarten, that exhibit our (North American) culture’s approach to educating children about narrative. The baseline game observation studied my three children over seven years at home. Both of these observations provided the rich descriptions necessary to understanding these mini-cultures and for finding patterns in their activities. Though the observation of one’s children arguably introduces an abundance of subjectivity, the quality and depth of observation provide detail unavailable otherwise. This method allows us to better describe a child’s point of view, rather than a characteristically adult point of view.

Today’s society changes quickly, and from one year to the next children are exposed to new books, new digital technologies, and changing ways of thinking about their education and their development. Even if we could control all of the variables in an event, no child would bring the same experience to it. As such, these studies could not be reproduced exactly. However, in these observations, I look to find patterns of experience, and have established general propositions that contribute to our understanding of what makes for a rich and engaging game experience. The linkage of children’s literature and games enriches both. This generalized reality is reproducible in varied contexts.
In interpreting the data that I have collected, I invariably draw conclusions that reflect my original interests, as well as the ideas and theories that have influenced my thinking throughout this research process. The strength of the conclusions lies in the breadth of the historical analysis, and in the rich descriptions of contemporary examples that support the proposition that children’s print and digital experiences share vital characteristics.

**Strategies and characteristics: making connections**

New media scholars have theorized about video games and taxonomies of their characteristics exist. There are no corresponding or parallel explorations of children’s print narrative experience. Because of this, I developed the characteristics of print narrative and game experience from different points of departure. For print, this was the analysis of historical literature about children’s narrative and literacy, together with my findings from the preschool/kindergarten study. This resulted in abstracting a set of literacy practices. For new media, the departure point was the analysis of gaming theories and taxonomies together with findings from my home observation. Narrative practices were then considered in light of the game characteristics to see where and how connections existed. More importantly, the explanatory value of these linkages frames this chapter.

**Figure 7.1. Early print narrative and narrative game experience: shared characteristics**

I developed Figure 7.1 to visualize the interplay between narrative and game experience. Although all of the game characteristics can be applied to all of the practices, to a lesser or greater degree, only those considered most applicable are linked. For instance, Narrative Text Interaction can be considered a social activity, but its primary characteristics are that it is interactive and engaging. The diagram shows the significant connection between children’s
narrative practices and the characteristics of gameplay. It identifies that both interaction and multimodal play are key elements of children's experience in both areas, showing that gameplay is an extension of print text experience rather than a major change in its presentation form.

7.2. Conclusions

The traditional narrative structure common in western literature denies the evidence of a long history of other narrative forms that have long brought stories to people. One of the reasons the "classic" arc has become the norm is because it is taught to us through formal schooling from kindergarten up. This norm is superimposed on the perceptions of narrative we form as young children, and takes precedence over these perceptions as we move from an iconic to a symbolic stage in our development.

When a young child's experience of print narrative is examined closely, it proves essentially different from an adult's. A child's engagement with print narrative is based in physical as well as cognitive activity, in contrast to that of an adult's, which is mainly cognitive. It is socially constructed through interaction with adults and peers. It is participatory and consists of interaction with narrative artifacts and multimodal activities in a creative space that children construct for themselves. This experience builds agency for children as they make stories their own, and provides for transformation as they create story characters. Key in our discussion is that early print narrative experience shares these experiential characteristics with those of gameplay.

When we look at children's narrative game experience, we find it is similar to children's print narrative experience. Rather than being solitary play, as has often been suggested, gameplay has a large social element. Parents, along with siblings and friends, are often a part of a "community" of play. This community has been enhanced through use of multiple controllers and, most recently, by the latest Wii controllers that encourage physical participation. With telecommunications the world becomes a play space. The interactivity inherent in digital systems has been well-used by game designers to engage children in physical and mental play within virtual environments. Children are encouraged to achieve goals, either on their own, or with playmates. This allows them to better attain a sense of agency or control. They are given structured opportunities to manipulate characters and events to transform them and in doing so, to make the narrative partly their own. The following section summarizes how each of the characteristics in our taxonomy reflects both the experience of print narratives and of games.
Reading stories is a social activity for children during which they build their understanding of narrative through interpersonal connections with family and friends. Their storytime activity is characterized by close proximity and sharing with parents, and in-group situations, with friends/peers. Young children continue to enjoy the social interaction associated with early narrative events when they become older and begin to engage games. Video games, though they can be played alone (just as books can be read alone) are regularly played, either collaboratively or competitively, with friends, siblings, and parents.

The print experience is based in interactivity as children enjoy stories in multiple forms. Children have opportunities to interact with stories cognitively as well as physically and do both when choosing scenes in a book, lifting a flap, or manipulating the inserts in a complex interactive book. Many games for children include activities similar to ones they encounter in their print experiences such as clickable animations (like lift-the-flap). Because children are well used to manipulating narrative artifacts, when children go to play games, it is a simple next step to manipulate characters. This physical or metaphorical familiarity eases the inclusion of a new medium into children’s narrative repertoire.

Young children’s engagement with print texts is encouraged through a variety of multimodal activities and narrative artifacts. Used to augment the reading experience when children are inexperienced readers, these activities and artifacts provide a range of playful ways to engage with story through interactivity. It is also interactivity that engages children in games. In this case, the engagement is situated in arcade-type action that moves the story forward. The more meaningful the interactivity, that is, the more purpose to the action that children can identify with, the more engaging the play.

When children take a print story and make it their own by playacting, drawing a picture of the characters, or making a Playdough figure of their favorite character, they have made that story their own, on their own. When they play out a story with a friend they make their own decisions about first, playing out the story, and then, about the characters and direction of the story. This ability to make decisions on their own, provides a sense of agency. In games, children make decisions about what games to play and what happens in the games. How well the game progresses, is partly up to them.

In playacting stories they have read or that someone has read to them, children may choose to become the character in the story. They then take on a new persona to live out the possibilities
of the story they have in their mind. When children become characters they are trying out
different ways of being and are transforming themselves. In games, children can either be the
character, as in first-person adventure games, transforming themselves, or they can build
characters, transforming someone else. Agency and transformation are an attraction of games.

Children create worlds for themselves while at home or at school. They do this by using
narrative artifacts, by performance such as dance, by playacting, or using story parts in activity
with friends and family in a spatial environment. In video games, three-dimensional worlds are
designed for children to enter. Children can make their character move through the space by
running, jumping, and finding artifacts to explore that help them on their journey, that often goes
on through many levels. Exploring space in a story is one of the pleasures of playing games, and
finding artifacts that help the character move through the story is one of the satisfactions.

7.3. Implications of Findings

My conclusions are not intended to be comprehensive or necessarily definitive, but to
include the central factors from my observation that are key to young children’s perception of
narrative and their subsequent game experience. In this study, I have tried to illuminate an
important relationship in the parallel worlds of traditional children’s literature and digital media­
based games that largely goes unrecognized. In doing so, I have exposed issues that I would like
to explore further. In particular among these are Anna’s interest in the binary experience in the
stories she listened to. The binary experience is ever present in game narratives. Exploring these
two in tandem would add the similarity in narrative structure to the link I make in experience.
My exploration of narrative on the internet was necessarily brief. I could not do justice to the
new avenues open for narrative expression on internet sites such as FaceBook. The rapidly
changing approaches to storytelling in this environment may well effect far greater changes in
narrative than games will. There is also the question of the tangible interface. Print artifacts are
physical. Despite claims that games are ultimately interactive, game artifacts have yet to achieve
this status. These are some of the areas in which I am putting my next efforts.

Before I describe my ongoing work it is important to suggest what this research implies for
two key figures, children’s authors and game producers. In addition there are global implications
for those disciplines with an interest in literacy, children’s literature, narrative, and new media.

A traditional narrative arc has long been seen as the norm for narrative in all media. The
view has limited opportunities for extending the range of narrative forms for games by
superimposing an incompatible story form as a requirement of game narrative. Accepting other forms of narrative, a number of which are more suitable for interactive environments than the classic arc, as legitimate narrative structures provides a range of new literary forms for games and opens a floodgate of literature to inspire game producers. On the other hand, the interactive narratives that games present currently can be given legitimacy as narrative forms.

Interactivity has been acknowledged as a property of digital environments, often to the exclusion of other media. Knowing that both children’s, and in some cases adults’ literature have historically included artifacts that encourage both cognitive and physical interactivity shifts the paradigm of creating game narratives.

Children’s authors know little systematically about why children successfully engage with narrative games. Understanding that what makes young children’s books engaging, also makes games successful, can provide authors with a new perspective about writing in interactive environments, and provide a possible direction for their future work. Likewise game producers have an incomplete view of why children engage successfully with games. Establishing a relationship between print and game experiences makes common ground for those who develop each. This common ground encourages the development of more diverse narrative experiences for children within a digital game environment.

Globally, knowing that traditional narrative structure is but one of several narrative forms provides a new perspective for scholars long accustomed to the classic arc as their benchmark in designing studies and building theory. The same is true of the new perspective of young children’s narrative perception. These ideas provide a different benchmark from which scholars can look at their research.

Further research

My research identifies that one aspect of children’s print story experience is manipulating objects. In digital environments, the physical reality of this manipulation translates to poking at keys, moving a mouse, or handling a controller. These interface activities have nothing to do with the story. The underlying precepts of this dissertation provide the rationale for development of a tangible interface system that makes the interface a part of the story.

PageCraft is a storytelling system that encourages children to interact with story on a digital screen through the manipulation of actual narrative objects. It gives children the opportunity to experience storytelling physically and interactively. PageCraft consists of a laptop book that has
interchangeable playmats, and a number of neutral blocks that children can use to represent characters and objects (see Figure 7.2). The story program has been designed to support children’s narrative development and offers a progressive experience. It takes a child from making characters move on screen by manipulating them on a play mat, to developing a story and producing it in print, and in audio and video form. This multimodal interface is appropriate for today’s technology savvy children.

As we develop the prototype further questions are raised. A number of these are concerned with children’s response to generic graphics and shapes, and to simple animation: will children use realistically depicted characters and objects in preference to generic blocks? Do the stories they tell change if the blocks they use are realistic rather than generic? Is it necessary for children’s physical movement of blocks to translate into realistic animation on screen, or do they make a leap of imagination through their story creation? We’ve learned from my research that real-time 3-d graphics aren’t necessary for children to engage successfully with story.

At the moment, PageCraft is poised between narrative and game. In this iteration of narrative play we want to know what will help children become more engaged with the story. Should we add more game-like qualities to provide a fusion of game and narrative in a tangible media? Shortly we will be taking the prototype to children to test and look to them for direction.

This is a collaborative project with the Industrial Design School at Carleton University in Ottawa. It has been presented at a number of conferences including the International Conference on Interaction Design and Children in Aalborg, Denmark, 2007.473

Figure 7.2. PageCraft474
PageCraft provides for storytelling activities through tangible objects that can be manipulated and are represented on a digital screen. This illustration shows the screen, playmat, and story blocks.

473 The conference paper PageCraft: Learning in Context can be found on the ACM Portal at http://portal.acm.org/citation.cfm?id=1297296
474 Copyright 2007 ACM 978-1-59593-747-6/07/0006
Appendices

Appendix A. At Home with Games
Appendix B. Homer's Iliad
Appendix C.1. Reading Grade-Level Expectations
Appendix C.2. Oral Language Resource Book
Appendix D. Preliminary Questionnaire for Caregivers/Teachers
Appendix E.1. Young Children's Narrative Experience Observation 1
Appendix E.2. Young Children's Narrative Experience Observation 2
Appendix F. Children's Book Resources
Appendix A. At Home with Games

Overview

Nicola (18), Michael (15), and Daniel (13) have had access to computer games for twelve years, since 1995 when they received their own computer, and to video games for nine years, since 1998 when they received their first Nintendo64. Indeed, Daniel was booting up the Mac by himself to play Richard Scarry story games when he was eighteen months old. The children's game activities range from solitary play, to play times with a sibling or friend, to parties when many friends gather to play. Michael and Daniel play games more often than Nicola does, and discuss their game strategies and preferences on a more regular basis. These discussions often take place around the dinner table, and provide me with the opportunity to ask questions. Each child will occasionally rush to tell me the good news about aspects of game play such as how many new attributes his or her characters have acquired in a play session, and I take the opportunity to sit down and ask questions about a game they are playing in which I am interested. My children are aware of the research I am doing, and do not seem to be self-conscious about answering questions, having discussions with me, or including me in their discussions, even when friends are present.

The different venues in our home available for game play permit me to observe my children and their friends without a sense of intrusion, though intruding does not seem to affect the way they play the game or interact with their friends. There are four main areas in which they can play: the games room where there is a Wii and a large screen digital TV, the family room (an extension of the kitchen) which has the GameCube and a smaller digital TV, the living room which houses the PS2 and games such as Guitar Hero and Dance Pad, and the dining room next to it where the PC and Mac are located side by side on a large desk. Both of these last two areas are visible from the kitchen. When friends are over, there are often children playing in two or three of the areas, and during parties sometimes all four areas are used at the same time. Games used at parties are generally arcade-style games because it is these games which can accommodate two, four, or more players. Study resources that the children have access to at home such as books, equipment, and games, are summarized in the next section.

Study Resources

In addition to the resources available through libraries and the internet, our home library includes over 2500 children's books, 300 children's movies, and 200 games in various formats. It includes books for very young children (Peter Rabbit), for older children (The Hobbit), and books
in various formats such as small board books, pop-ups, and interactive books such as *The Jolly Postman*. In addition to the books, the library holds narrative artifacts such as posters, colouring books, paper dolls, dolls, stuffed toys, trains, and building toys that are associated with stories and their characters such as *Peter Rabbit*, *Maisy the Mouse*, and *Thomas the Tank Engine*.

Currently the computer and game console equipment includes a PC (HP Media Centre) and Mac (G5) computers (both wireless with access to highspeed ADSL), GameBoy Advance, Playstation DS and the PSP handheld devices, and SEGA, Nintendo64, Playstation 2, GameCube, and the WII. The console peripherals include joysticks, driving wheels, dance pads, bongo drums, guitars, as well as the eye toy. *Aibo* was a pet for a while. The game collection ranges from ludic to narrative games. It includes many arcade games such as *Banjo Kazooie*, sports games such as *FIFA Soccer*, and building games such as *Rollercoaster Tycoon*. There are also edutainment games such as *Where in the World is Carmen Sandiego*. The narrative games range from CDROM storybook old timers such as *Benjamin Bunny*, award-winning digital games such as *Alphabet*, and the most current games such as *Trauma Center: Second Opinion* for the WII.

In addition, a horizontal integration of stories has been provided through the acquisition of videos and games associated with books such as *The Polar Express* (for younger children) and the *Harry Potter* series (for older children) as these became available. As games are often spin offs of movies and vice versa, both the video and game of, for instance, *101 Dalmations*, *Shrek*, and *The Lord of the Rings* have been added. Some of these stories were available as movies first, some as games, which speaks to the transposability of story.

**Narrative**

Although the *At Home with Games* began more formally in the fall of 2000, it is grounded in past experience with children and stories. The following is a narrative description of this past experience and of the observation period at our home. It is intended to capture the essence of that time and present some of the events which led to conclusions about characteristics of the game experience. At some point in the future it will be fleshed out further to provide more detail.

**Story Encounters**

When I first determined it would be useful to observe children playing video games, it seemed natural for me to use my own three children. They were conveniently at hand, I did not have to adjust either their schedule or mine, and I could observe their activities in real life context. In addition, print narratives were a large part of our lives, and digital narratives were also becoming important. Too, I was familiar with their past narrative experience in both print and digital, indeed in all media.
Print Stories

I am a proponent of books and the stories they have to offer. My three children, now teenagers 13, 15, and 18, have been immersed in print story experiences since they were born. They have been read to each and every evening since they were a few months old. As toddlers they literally wore out favorite books, such as *Sam Who Never Forgets* by Eve Rice and *Big Sarah's Little Boots* by Paulette Bourgois and Brenda Clark, through repeated readings. When they started school I began to read to them each morning as well as each evening. I mixed the short tales such as *Alexander's Horrible No Good Day* with chapter books such as *Little House in the Big Woods*. These, though longer, could be read like serials, a chapter each morning or evening. Some series such as *The Borrowers* we read half a dozen times over as many years. Today this pattern continues. I still read to the 13 and 15 year old each morning and evening. Though I no longer read to my daughter, who is eighteen now, she listens in in the morning when I read to her younger brother as her room is next door to his. Every once in a while she drops in on our evening communal read to listen and invariably pipes in with comments about bits of the adventure we are reading. Our current morning rostrum includes a rereading of Kipling’s *The Mowgli Stories* (to Daniel, 13) and Buchan’s *The Three Hostages* (to Michael, 15). Evenings we are rereading *The Hobbit*. We have, over the years, collected a library of over 2,500 children’s books (not including *Archie Comics*) and we continue to add classics and new stories as they emerge. Each new book adds to our view of the world.

When my children were little I would take the opportunity to read stories, lead sing-a-longs, and do fingerplays with the children at their different playschools. In elementary school I volunteered in their classrooms, reading stories, teaching poetry, introducing crafts and string games related to stories. At home, storytelling was often a prelude to singing, playacting, or just plain acting silly. Stories were the beginnings of Thanksgiving puppet shows and Christmas Playdough scenes. As the children grew older, television and videos added to their range of stories, and these too were used to inspire playacting, writing stories, or creating art. When we lived in Urbana-Champaign Nicola, seven at the time, won a *Reading Rainbow* award for the writing and illustration of her original story *Caring for Kitties*. Her story, along with other children’s, aired as promotional features for the program on PBS. At Chalker Elementary in Acworth, Georgia, the children participated each year in a statewide event that encouraged children to create stories, art, or music to a theme such as “I looked behind me and I saw...” All three children participated, occasionally winning awards, but more importantly responding to a story suggestion in ways they found most expressive.

Games

We had purchased our first family computer for our children, an Apple 2e, in September 1995 when Michael was almost three and a half and Daniel almost eighteen months. Though both my spouse and I had computers which we used for business, a family computer seemed a sensible choice as an additional resource for the children’s schoolwork and play.

Hopeful of finding an interesting range of programs for young children I looked for programs that would provide different literary, play and educational experiences. I expected to find an array of offerings. I was accustomed to the breadth and depth available to me in children’s books and so was disappointed in the limited number of titles I could choose from. But I did find software programs that were story-based such as *Charlie and Slater Go Camping*, *Just Grandma and Me*, *Mud Puddle*, and *Busy Town*, in addition to educational programs such as *Reader Rabbit*. Initially we would pick a program together, then we read the stories and played...
the games within the story, whether they were click-the-object, or make-the-puzzle, or find-the-
way-to-the-firehall games. Once adept, the children played the games themselves. Three
months after we'd purchased the Apple, I got up one morning at seven AM to find then eighteen-
month old Daniel scurrying his beloved Richard Scarry characters through Busytown. He'd
booted up the Apple, inserted the game disc, and was playing the game with no assistance from
either older siblings or parents. The children particularly liked stories where they could make
things happen rather than stories they could just read, i.e. stories that were more game-like.
They played Just Grandma and Me more often than they did Peter Rabbit for instance and
seemed to have more fun doing so.

Once I'd mined this early trove however, I found only a limited number of software
programs that I considered engaging, entertaining, and wholesome, that is, without a lot of
fighting and pounding, with which I wanted my young children to engage. A few were story-
based, such as Mud Puddle, some were more educational, such as Reader Rabbit. At the time I
did not consider these programs to be games. I was opposed on principal to my children playing
video games preferring that they read, did crafts, or played with their Lego or cars. As I wrote in
my Master's thesis a few years later, "As Cynthia Selfe says about her colleagues in the
composition field, "We have convinced ourselves that we and the students with whom we work
are made of finer stuff than the machine in our midst, and we are determined to maintain this
state of affairs."" (Technology and Literacy: A Story About the Perils of Not Paying Attention,
1999). This is certainly the way I felt at the time.

Both they and I were, however, introduced to the world of video games that same year.
We lived in Urbana Champaign at the time and during a Christmas gathering at the home of
Donna Cox, who taught at the University of Illinois (She is currently Director of the Advanced
Visualization Lab at NCSA), a prerelease version of Mario64 was available for play on the family’s
game console. The children were enthralled in making Mario run, jump, and stomp through
various scenes to outwit Bowser and find Princess Peach, all the while collecting points. The
university students participated with equal enthusiasm, as did the other adults. Here was a game
enjoyed by both young and old.

Ably resisting many pleas I did not purchase a game console. After we moved to Atlanta in
the summer of 1997, arcade-type games such as Power Pete and The Fury of the Fumes did find
their way onto our computer from the internet. I was not a convert to the supposed “awesome”
qualities of these games that held my children, in particular Michael, who was five at the time,
enthusiastically, and they generated numerous ultimatums about the impending demise of the family
computer because of its overuse for “dumb games.” Older, and more adept than his brother, he
played while Daniel watched. Michael would become so engrossed with playing the game that it
would be difficult to pull him away from it. Once he was in the middle of a game it seemed to
become mandatory for him to achieve the goals set by the game. As these were skill-based
arcade games, and it was difficult for little fingers to keep up with the speed of the action, the
result, more often than not, was frustration at not beating the game and an ensuing temper flare-
up. Both I and my spouse played these games with the children, and we would often be called to
“get Power Pete around the lake” or the “Furry to the next level.”

The same type of intense engagement did not occur when either of the boys was playing
what I now call story games such as Just Grandma and Me, Winnie the Pooh, and Richard
Scarry's Busytown, and more education-oriented games such as Where in the World is Carmen
Sandiego, Reader Rabbit, and Jumpstart Adventures. When they played these type of games the engagement did not seem to be as intense and they could pull out of the play activity more easily. Winnicott suggests in his description of play that this involvement, and the difficulty in leaving the game, is a characteristic of play for young children. There is some element of flow here but Winnicott's description seems to address the issue of the difficulty of withdrawing from the game more aptly.

During this time, the children played on the computer either alone, with mom or dad, or with a sibling. Friends were not invited to play computer games, possibly because the children were too young, possibly because there were other activities planned for play dates.

We finally purchased a game console in 1998, when Michael my middle child, was six. It was a Nintendo 64 and with it we purchased Mario64. We all played the game, gathering stars inexpertly at first. Then the two boys, who, though they may not have been more interested in playing the game then were the rest of us, had more time to do so, forged ahead. Within days of his first forays into Mario64, Michael was frowning over words in the pop-up instructions that he didn't know, trying to figure them out to move forward in the game. To assist with game play we purchased the manual. It was then I learned what a powerful combination a game and a printed game manual were in inspiring both an interest in learning to read and training in doing so. Though my son Michael had loved to listen to stories, his interest in learning to read was pretty minimal. Now he learned in record time. Michael's brother Daniel is two years younger. Between them, Michael six and Daniel four, they worked their way through multiple levels of playing, reading, and interpreting maps to eventually attain 99 stars. Michael became an avid reader of everything, consuming a book a day whenever possible. Daniel followed closely on his heals. He admits to a predilection to graphic stories however. (Michael likes all stories, Daniel's favorites are graphic stories like Bone.)

The manuals were particularly useful in defining the different levels of the game and helping to orient ourselves to where in the game we were located, both within the level we were on, and within the game as a whole. Michael and Daniel would sit on the bed in the guest room where the Nintendo was located and pour over the manual as they worked their way around a level. They became very adept at reading visual representations of a complex space in print and translating their understanding of the space to their play within the space on the screen. Many of the scenes involved very complex structures in a wide variety of different worlds and Mario successfully jumped, pounded, and flew his way through scenes that included naturalistic landscapes, interiors of palaces, boats, caves, and fantastical spaces created out of geometric structures to find Princess Peach, but mainly to get Power Stars to get to the next level. They loved to play, possibly be, Mario as they played their way through these many different environments, losing health, learning where there was more and getting it just in time to try for the power star. They seldom sat down at a session without getting Mario to the next level, and almost always learned some new game skills along the way.

Some of the scenes they played repeatedly were those which involved fast travel down spiral tunnels with every potential for hurting off the edge into oblivion... there seemed to be less stress involved in having to start again in this sequence than in the previous arcade type game Fury of the Furries. There was frustration in not being able to get to a certain star, however, perhaps the gratification of having a number of stars already, and of being able to collect stars,
retrieve health points, i.e. of having some measure of control over the situation, made it less frustrating.

There was a change in environment in moving from the computer to the game console. The children no longer had to sit at a chair within inches of a computer screen their hands on a keyboard in order to play. In our guest room they sat on a twin bed made up as a sofa as they played, controller in hand, and manual on their lap or beside them, watching the TV set up in a shelving unit on the opposite wall. They moved about, occasionally jumping with joy, or rolling over and groaning with disgust as, once more, they fell off a cliff. Their friends joined them here, gathering around, and watching together, generally acting like kids do.

Our house was often full of children from the neighbourhood, and now it was more so. Little friends came to play Mario and other games often (Nick, Stephen, and James). Older neighbourhood friends, children two or three grades ahead of Michael in school would also come over to play Nintendo64. Mario was single player game and the kids would pass the controller to each other to have turns at getting through a scene. They would make comments about play and shout advice. Though they were engaged in the game when each of them was playing, they were not so immersed as to lose track of what was around them or become so intense that they could not withdraw without some frustration. Their friends kept them grounded on the outside; they provided a link to the outside world which did not make the game any less enjoyable, just played with a different focus. Other games such as MarioKart64 were multiplayer games and there were often either two, three or four children playing with their own controllers. We had two and friends would bring extras. The different driver characters each had different attributes that helped them win the race and the children could pick which character would be the driver. There was no advice offered to other players in these ludic games, there was only an interest in winning, but it was seldom quiet and the races were accompanied by groans, cheers, and irreverent comments.

In addition to Mario, we purchased sports games such as the snowboard game 1080, racing games such as MarioKart and Cruisin’World, arcade games such as Banjo Kazooie, puzzle games such as Pokemon Puzzle League. They particularly liked to play Pokemon games because this story was also on television and had an extensive set of toys associated with it. It was the most horizontally integrated story/character set we acquired, with figures, board games, card games, books, videos and a range of video games that had different activities such as taking photographs of Pokemon. We purchase many computer games that were spin offs of stories/movies such as 101 Dalmations, Toy Story, and Hercules. The computer games they also played quite a bit were building games like Tonka, and the more educational games like Carmen Sandiego. Carmen was a popular game with all of us, and I often played Carmen together as our combined knowledge (the kids and me) got us further in the game. They would play the same assignment over again to get further along. This didn’t seem to frustrate them. The characters talked to the kids directly in different accents which added a neat element to the game. They also liked design/art programs like Kid Pix, which they played extensively to make different types of art projects. They had many games to play and made their own choices about what to play. They often played more educational games as they were allowed a longer period of time to play these as part of their homework prep.

The children were limited in the amount of time they could play either video games or computer games whether they were playing on their own or with friends. Every half hour or so
they were asked to take a breather and go outside and play. They did not object too strenuously as it was a rule of being able to play video games. Indeed, when I called for them to take a break, they seemed to enjoy rustling their friends up and rushing downstairs and outside to do something like toss baskets. They liked to vary the games that they played. Once they’d attained a level, they would move on to a different game. Perhaps to have a different type of experience, perhaps because they were bored. Often they would change games at the instigation of a sibling or friend.

Michael and Daniel played the games more often than did Nicola. There were quite a number of girls her age who were immediate neighbors and she spent her time playing with them. The boys had fewer friends who would come over, though this changed as we stayed in the area for longer.

In the fall of 1999 I began my Masters in Professional Writing at Kennesaw State University. There I was introduced to Janet Murray’s book *Hamlet on the Holodeck*; I also attended the DAC’99 conference held at Georgia Tech that year. Murray provided a vision of a narrative reshaped by the opportunities afforded it by technology and her understanding that children were already at home in this new technology. And Espen Aarseth, Katherine Hayles, Markku Eskelin, Robert Coover, Jay Bolter, Janet Murray, Terry Harpold, and Johanna Drucker, among many others, discussed new media, narrative, and the implication of new forms and provided many diverse views on the direction of narrative in new media. Sue Thomas of trAce put the differing, often antagonistic, views into perspective when she said each of these theories is like an instrument in an orchestra, each adds its own sound to the symphony. This event together with Murray’s book changed my view of children’s use of computers and games. Whereas previously I had not viewed console games as a vehicle for stories it appeared that they did have considerable potential for storytelling. I had seen the strong enchantment these games held for my own children and thought it would be worthwhile exploring their narrative possibilities.

In fall of 2000 I conducted my first study of Michael and Daniel playing narrative games (*Reading Stories: Books and Computers Literacy Observation, 2001*) and began to observe the game play of all three children more consciously. This first project looked at them reading two of their old favorites *Benjamin Bunny* and *Grandma and Me* and playing the respective games on the computer. They liked to read their old favorites again. Michael didn’t like the book-like effects the publisher attempts in the *Benjamin Bunny* book. I noticed how the game-like narrative really attracted Daniel into the reading/play space.

One of our friend’s children gave us a copy of *Zelda*. He’s older and this game is rated for older kids. I avoided purchasing older games though they have occasionally played them at other children’s homes and have asked to buy some of them. It is difficult to keep games away from the children when their friends are playing them. I told them often that many games are more violent than those we have and that I prefer they not play them, or if they do, not often. And I preferred not to purchase them. Some of the games their older friends had in their homes included *Resident Evil* and *Grand Theft Auto* that seemed unsuitable for us.

We managed to be one of the first few to get a Playstation 2 when it came out that Christmas. With the PS2 we began to acquire more narrative video games. One of the first games for PS2 *Evergrace* was a role-playing game in which we could customize weapons, armor, and clothing to change a character. This game didn’t interest the children, though their dad occasionally played it as on a few occasions did I. I found it tedious. They played instead older
Playstation games such as Croc, the Legend of Gobbos, and Spyro the Dragon, games which had a story but were their familiar run, jump, climb, and stop type of games. When story games such as the Harry Potter games were released we purchased each of these. The children saw the movies and played the games because they enjoyed the movie. They often repeated playing special scenes they liked in particular.

We moved to Port Moody in summer 2001 and the children had a better set up for game play. There was a large family room in which we put the TV/game consoles set up and they could sit on sofas or on the floor a comfortable distance from the TV and play.

The children became interested in role-playing games when they purchased Dark Cloud, which all three of them liked to play. Nicola also played Rhapsody, A Musical Adventure which added music to role-playing. Nicola played games here more than in Atlanta, possible because the game consoles were now more a part of the general family play space. She played games alone more often while the boys played both alone and accompanying each other. Sometimes they would vie for time and I had started a system where they used a time and each could play a certain amount before they had to pass the system over. There was quite a bit of contention about who played how long, and indeed about how long they could play. There were occasional places in the game that they could stop, but if they were not attaining a level they wanted to continue playing. It seemed that there were no natural breaks that were easy to recognize and define their time with. They could continue playing for hours without noticing that the time was flying by. They may have been enthralled with the game content, or held by the action, or by a desire to complete the activities to get to a goal such as the next level. The reasons were probably different for every session. This issue with time never seemed to stop, once focused on a computer or game console activity that is of even minimal interest it is hard to pull them off it to focus on something else.

The different games gave them different skill sets. As they played more action games, they became physically skilled at manipulating the characters through the different scenes, but they also thought quicker to solve problems. The RPG games were actually quite different games to play. They were slower games to play but added different types of tasks to the repertoire of activities in the game. They also encouraged a more conscious connection to the character by having the children add attributes. They had been able to give a player like Mario more power by getting him a flying cap, but that was minimal in comparison to the changes in attributes they could give Dark Cloud characters. They made different types of choices here, not just movement choices, or character choices, but choices in how their characters would be defined. This provided opportunities for thinking about how they might get to a goal and creating the character that had the best opportunity to get there. Of course, they did have the challenge of attaining some of the attributes. Getting the character the attributes that were most desirable became a challenge, and the characters started coming to the table. Where as before it was a matter of what level they got to and that they beat Bowser, for instance, now they came to the point where they talked about how they built up a character and what s/he could do.

I was now far behind their video game skills and they would make suggestions for how I could accomplish a task when I joined them. Eventually I fell off the radar as a player, I became the observer.

When we got the GameCube I decided to provide a number of different areas for game play so that the different consoles had their own space and the children changed their
environment when they moved from one system to another. We had moved again to a house with a number of different spaces that could be used for entertainment. The GameCube was in the kitchen/family room. The Playstation and Nintendo were in the living room and the computer in the dining room which were both right next to the kitchen and visible from it. I liked this arrangement as I preferred to be where the action was and liked to know what games were being played and how long they were being played. We added a dance pad and kongas to our gaming goodies. They used the dance pad at parties and they got into competing with each other and with their friends for a number of months. Occasionally they played on their own, Michael more than Daniel, but the game needed a set up and had to be put away so it didn't get as much play as other games that were simpler to get into. Daniel in particular wasn't into setups. Daniel played with the Eye Toy and kung-fued and shadow boxed a few times. When he did so he didn't get the satisfaction of doing it very well as it requires quite a bit of learning the coordination to make your body fit with what was going on on screen. There wasn't enough fun for him to do it more than a couple of times before he gave up on it. The kongas were used quite a bit, in particular with friends. They made an agreeable noise and were more physical to use than controllers but they version we have is limited to the music game.

Guitar Hero which we got about two years later has replaced the kongas and is used more consistently and by more of the children's friends. Older as well as younger children play it, and Nicola's friends enjoy it as much as do Michael and Daniel's. Like the race games, each music game has a defined end point and the game is often interrupted by a sibling or friend so that they get a turn. We have two guitars so that dueling goes on, occasionally very tensely or sometimes with great hilarity depending on which friends are playing. Each of the friends brings their own personality to the music play. Because the play is short, not like narrative games, the kids can get in and out quickly. When friends come over this is a nice feature as they may need to get home and the know for themselves whether they have enough time to play the next song. The problem for the kids with narrative games when friends are over is that the games take some time to complete. If only one friend is over, and over for some time, such as the afternoon, then they will play an action-oriented narrative game such as Harry Potter or Lord of the Ring.

Michael and Daniel continued to want games that resulted from stories such as Star Wars and Lord of the Rings. The last game Lord of the Rings: The Return of the King particularly enthralled Daniel as there were cut scenes from the movie and special interviews with the actors who had participated in making the game that could only be achieved if certain levels of the game were attained. He took a lot of pride from getting to these levels and calling me over to show me the scenes. This personal note made the game memorable both for him and me. Once this game was played and won, he did not go back to play it again.

Michael was interested in older systems and enthusiastically purchased a Sega System for himself along with the game Fur Fighters and NFL 2K1. He had wanted Sonic Hedgehog but it was difficult to find and though we did find it on eBay we didn’t purchase it. We continued to look in stores like EA but there were fewer and fewer games available as new systems came on stream.

Daniel had been lobbying for a handheld for a while and eventually purchased a GameBoy Advance for himself. The games he purchased for this system included a range of games from ludic to narrative, Super Mario World, Monkey Ball Jr., Kirby Nightmare in Dreamland, The Lord of the Rings, and The Pirates of the Caribbean. His favorite though was based on the Pokemon
characters *Pokemon Sapphire* and *Pokemon FireRed*. He played this in the car, waiting for dentist appointments, and anywhere in the house he happened to be. Occasionally he would play with friends but more often then not he played on his own during “in between” times, times when he was waiting for something or when he was going somewhere. For him it replaced taking Archie Comics to read during these times. Soon after he bought a Nintendo DS which had a second screen on which he could play mini games that were part of the larger game. The games for this included *Nintendogs*, which was a simulation game in which he cared for and trained puppies. It also included *Age of Empires* which was originally a PC strategy game. In it he could take command of armies and plan battle strategy within a historical context that included Richard the Lionhearted and Joan of Arc.

The kids wanted to get the simulation game *The Sims* but when we did they only played it for a while. Perhaps they did not find the real-life simulations that entertaining, perhaps because we have so many other games, perhaps because I wasn’t prepared to purchase newer versions. Nicola did play this game more than Michael and Daniel did. Nicola also wanted to play the role playing game *Final Fantasy*. We purchased *X* and *X2* which she played two or three times a week for a few months. It was one of her favorite games after *Rhapsody* which she had played a few years early and was a musical adventure game. She commented often on how she wished she could play as well as her brothers because she could not make everything she wanted to happen do so. She was critical of the graphics, for all their realism. Her most memorable comment was about one of the player’s hair, which annoyed her because for all the realism in the graphics the character’s hair did not move.

We purchased *Animal Crossing*, also a simulation game, when it came out and *Kirby Ride*, a racing-type game, at the same time. Daniel played these two games equally for a while. in *Animal Crossing* he constructed a home and a village and visited between his house and village and other houses and villages. He talked about the home and town he had created and how the characters got oranges and other fruit from different towns. Michael created a home as well but he had begun to delve into online games and was more captivated by playing online. He played *Ragnarok Online* rather than *Runescape* which Daniel was already playing with one of his friends because “when you die you lose everything” and he didn’t like that. A number of his friends played and they discussed the game at school and connected through it after school. He built up his own little environment within the game.

Nicola got a boyfriend in grade 11, Richard, and he would come over and play games with Michael and Daniel (He also played street hockey and other sports with them as well). Everyone (two sixteen year olds, a thirteen year old and a twelve year old) would then go over to our neighbors to babysit their two young boys (Jack and Cole, five and three then). One of the favorite activities (given that it rains a lot) was to play video games together. The games they played all together were ludic games, *Kirby Ride*, *Super Smash Bros*, *Star Wars Lego* when the boys were older, five and seven, *Star Wars Battlefront*.

When the Wii came out we were in line from midnight on to get it. The boys took their sleeping bags and parked themselves outside of Future Shop about ninth in line. By morning the line had grown to hundreds but there were only 72 systems for sale. It was pouring rain and lots of people got very wet waiting to get their system. We purchased four controllers and got three games, *Wii Sports* and *Zelda* came with our package and we purchased *Red Steel*. These are respectively a sports game, a narrative-action game, and a first-person shooter game. I then
purchased *Trauma Center, Second Opinion*, which is a simulation game, and *Elebits*, which is a first-person adventure game. This selection provided my (now) teens with a range of games for the Wii from ludic to narrative. In addition they downloaded *SuperMario64* from the internet.

The system became a magnet and we had a stream of friends come by to try it out. When only one friend was over, all of the games were played, but when there were more than three of four people the more action-oriented games were played. When we had parties, everyone got into the action, if they weren't playing, then they were commenting. The player would be concentrating on the game but also be aware of the crowd around them and would often be interacting with both.

Each of the boys has their own style for playing the Wii. For the sports games, which they both play, Daniel gets up and is active; Michael is a minimalist and uses his wrist to achieve the same action. Michael played *Red Steel* at first and now he plays *Metroid Prime*, both violent first-person shooters. Daniel does not like playing these as much. He plays *Zelda, Trauma Center*, and the sports games more.

They move from system to system, sometimes spending a month or so playing one predominantly. Just recently they rediscovered the Nintendo64 and Daniel in particular played some of his old games. Our last new purchase was PSPs for both Daniel and Michael. The games they have purchased are SSX on Tour (snowboarding), ATV Racing, and DJ Max (dancing). They have no narrative type games for their PSPs which they take with them everywhere they are likely to be bored waiting. The narrative games they return to are games such as *Age of Mythology* and the online games such as *Ragnarok*. They have purchased *Half-Life* for the PS2 but are not currently playing it very much. For the most part they are playing more ludic type games on this system, perhaps, but not necessarily, because that is what they have chosen to buy.

Daniel recently purchased a new *Star Wars* action adventure game and within two days had "beat" it. He thought he could exchange it and learned differently. Michael and Daniel are at the stage, and possibly have been at for a while but I haven't noticed, when they no longer want to play a game a second time, particularly as the game play is not sufficiently challenging to hold their interest. Perhaps much in the vein of a popular adventure genre paperback, the action adventure game's nature is to be played once and then discarded or passed on.

At a future time I will fill in more of this narrative from my observation notes and memories; there are still many events and games that warrant writing about.
## Appendix C.1. Reading Grade-Level Expectations

<table>
<thead>
<tr>
<th>Kindergarten:</th>
<th>Grade One</th>
<th>Grade Two</th>
<th>Grade Three</th>
<th>Grade Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retell familiar stories using a beginning, middle, and end. (Note: Story telling order can differ between cultures. For example, in some cultures the end of the story is told first.)</td>
<td>Retell stories with correct sequence of events.</td>
<td>Retell text focusing on the problem or events in sequence.</td>
<td>(Expanded to: Understand sequence in informational/expository text and literary/narrative text.) Explain story ideas or events in sequential order. Select, from multiple choices, the order of ideas, facts, events (e.g. what happened first, next, last' the order in which ideas or facts were introduced)</td>
<td>Explain ideas or events in sequential order Recognize and explain literary/narrative text written out of sequence. Explains steps in a process, Select from multiple choices, the order of ideas, facts or events.</td>
</tr>
<tr>
<td>Identify story elements of character, setting and important events with teacher guidance.</td>
<td>Identify and explain story elements.</td>
<td>Describe physical traits of characters and how they act Retell the important events of a story. Describe the setting of a story, Identify the speaker/narrator in a story</td>
<td>Describe characters' physical traits and infer personality traits by what they say and do Describe the problem faced by a character and how he/she/it solves the problem Explain how the setting is important to the story, Identify the speaker (narrator) in a selection and explain first-person point of view Select from multiple choices, the best description of a character or setting in a story or poem.</td>
<td>(Expanded to: Understand and analyze story elements) Use knowledge of situation and characters' actions, motivations, feelings, and physical attributes to determine characters' traits Identify the main events in a plot, including the cause and effect relationship in problem solving Describe the components of setting and explain how and why setting is important to the story Differentiate between first and third person point of view in a selection and explain the difference Select from multiple choices, the best description of a character or setting in a story or poem.</td>
</tr>
<tr>
<td>Predict text patterns using attribute and/or concept books Recognize and use sentences, paragraphs, and chapter structure to understand the organization in both informational/expository text and literary/narrative text Identify text written in the text organizational structures of simple listing and sequential order</td>
<td></td>
<td></td>
<td>Recognize and use previously learned text organizational structures of simple listing and sequential order to aid comprehension. Identify and use text written in the text organizational structures of description and compare and contrast to find and organize information and comprehend text.</td>
<td>Recognize and use previously learned text organizational structures (simple listing, sequential order, description, compare and contrast) to aid comprehension. Identify and use text written in the text organizations structure of chronological order to find and organize information and comprehend text.</td>
</tr>
<tr>
<td>Grade Five</td>
<td>(Changed to: Apply Understanding of time, order, and/or sequence to comprehend text)</td>
<td>Use knowledge of a situation, characters' actions, motivations, feelings, and physical attributes to determine characters' traits. Identify the major actions that define the plot and how actions lead to conflict or resolution. Explain the influence of setting on character and plot. Identify the narrator and explain which point of view is used in the text. Explain how a story would change if a different character narrated it. Identify the stated theme/message in text and support with evidence from the text. Identify common recurring themes/messages in books by the same author. Select from multiple choice, words or selections that best describe specific story elements from the story, selection or poem.</td>
<td>Recognize and use previously learned text organizations structures to aid comprehension. Identify and use text written in the text organizational structures of cause and effect and order of importance to find and organize information and comprehend text.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C.2. Oral Language Resource Book

Beginning
When telling a story the child focuses on concrete objects and actions. There is little organization or sequencing. Simple words and short phrases are used.

Text Content and Organization: The child
- offers a list of items or actions. e.g. He had a cat. And a house. And he gave the dog a bone.
- makes one word statements, e.g. Dog. Hungry.

Developing
The child relates a series of events and requires listener support through prompts and questions.

Text Content and Organization: The child
- relates a series of events that have the beginnings of narrative structure, eg. setting, characters, problem
- has difficulty linking main idea and ending, e.g. Peter went to the shop. He got chips. I like chips.
- begins to integrate the sequence of events in correct order.

Consolidating
The child tells a story that has a simple narrative structure, e.g. a problem, series of events and resolution. The text is independently produced.

Text Content and Organization: The child
- shows an awareness of narrative structure: setting, problem, sequence of events and concluding statement
- elaborates details to provide further information, e.g. character descriptions
- sequences events appropriately, supplying supporting detail
- begins to link character traits with reasons for behaviour, e.g.
- The animals were lazy so the little Red Hen did all the work herself.

Expanding
The child’s story displays all elements of narrative structure and story-like vocabulary; includes all stages of narrative: setting, problem and resolution; provides a cohesive and coherent storyline, shows a highly developed understanding of links between character traits and response of characters to events.

Text Content and Organization: The child
- includes all stages of narrative: setting, problem and resolution
- provides cohesive and coherent storyline
- shows a highly developed understanding of links between character traits and response of characters to events
- independently plans and produces oral narratives
Appendix D. Preliminary Questionnaire for Caregivers/Teachers

Study: Young Children and the Dynamic of Emerging Narrative Process
Form 3B

I'd like to start the observation with some idea of the day-to-day activities that the children are involved in. Please consider and answer the following questions briefly. You can elaborate on the information you've written down when we talk about them during our interview.

1. Can you tell me what type of activities there are in your curriculum?
2. How would you rate the importance of reading books in the curriculum you have structured with one being least and five most important?
   1  2  3  4  5
3. How much time would you say you spend in reading to the children during their class?
   15min  30 min  1 hr  More than 1 hr
4. Describe what it is like to read a story (do the children interrupt, do they want to hear the ending)?
5. What are your favorite books to read to the children? (Name three)
6. Why?
7. What are the children's favorite books to listen to? (Name three)
8. Why?
9. Do any of the books they like have any special features (sound, lift the flap, odd size)?
10. If yes, are the children interested in these features or are they just incidental to the story?
11. Do you think the story would be of interest to the children without these features?
12. What reading related activities are in the curriculum (singing alphabet songs, cutting out letters, looking at words)?
13. What percentage of time would you say you spend in reading related activities?
14. Do you use print stories as a catalyst for other narrative activities such as finger puppet play or playacting?
15. Do the children use the language from the stories in their play (i.e. repeat a favorite phrase)?
16. Are the children allowed to access books to look at on their own or with friends?
17. If yes, describe how they read/share the book.

Thanks for your help. Your insight into the children's activities will help when we consider how they view narratives in their print story related activities. We appreciate the time you took to think about these questions.
Appendix E.1. Young Children’s Narrative Experience Observation 1

Observation: West Vancouver Playschool
Dates: Monday, November 14 – Friday, December 17
Number of adults: 3, 2 teachers – Heather Montgomery, Alexis Conlin, observer – K. Madej
Number of children: 21, 13 girls, 9 boys
Age: +/−4

Setting: This preschool is next to Pauline Johnson Elementary the French immersion school in the area. It is housed in a trailer which seems permanently established next to the playground of the elementary school. The classroom is large and has areas specified for different activities.

Activities Schedule:

12:25 Doors Open
12:35 Meeting/Sharing
12:45 Activity/Free Play
1:45 Cleanup/Handwash/Snack
2:10 Circle Time – songs, stories, music
2:30 Outdoor Play
2:55 Home Time

Floor layout:

![Floor Plan Diagram]

Activities

Entry: consists of area to hang coats, place boots, knapsacks; Each child’s picture is above their hook. There is a table with a box that holds the children’s art work which parents can access themselves.

Sand table: to the right of the doorway as you walk into the room is a table which holds sand and sand toys. This table is covered except for play times.

Teachers area, sink, washroom: to the right of this is the teacher’s desk and bookshelves which hold reference materials, the first aid kit and the telephone. Behind this area is the sink and the washrooms, a boys and a girls, as well a cupboards containing supplies.

Building/pretend play: In front of the teachers desk are shelves which hold dollhouses, zoos, building toys, puzzles. There is a table in front of the window and another set of shelves which
parallel those in front of the teacher’s desk and hold Lego as well as other types of building pieces as well as cars, animals and people.

*Playhouse:* Behind these shelves is a kitchen with stove, fridge and shelves as well as a child sized love seat, a cradle, a high chair and some cupboards which hold dolls clothes and dress up clothes (doctor, nurse accessories)

*Meeting area:* The house area extends into a meeting space against the back right hand corner of the classroom which has a large rug, shelves which hold some building structures like the marble tower, display shelves for books, a table and a chair at which one of the teachers sits during meeting time.

*Playdough table:* we are back at the front of the room and right in front of the doorway is a square table with four chairs around it at which the children usually work with Playdough. Along the left wall is a long counter which houses art supplies, kettle and microwave.

*Cut/draw table:* Right behind this is a large round table generally used for drawing, coloring, cutting and gluing.

*Painting:* At the back left of the room there is an easel at which the children paint.

*Crafts:* Right next to this painting area is a large table at which the children usually do their main craft. One of the teachers generally sits behind this table to direct the activity.
Appendix E.2. Young Children's Narrative Experience Observation 2

Observation: Mulgrave School, Kindergarten  
Dates: Thursday, January 12 – Friday, January 20  
Number of adults: 2, teacher – Ms. Koehle, K. S. Madej – Observer  
Number of children: 16, 8 girls, 8 boys  
Age: +/- 5

Setting: This kindergarten class in a small private school with 750 students in grades K-12. There are two kindergarten classes with approximately 20 children in each. The classroom is large and has areas specified for different activities.

Activities Schedule:
Choosing  
Morning meeting  
Snack, recess  
Math  
Unit of Inquiry  
Lunch  
Buddy Reading  
French  
Sharing/Choosing

Floor Layout:

Activities:

Entry: consists of area to hang coats, place boots, knapsacks; series of drawers for the children’s work; a supply cupboard with doors, children stick their name tags when they arrive at school on one of the doors, tags naming those who have not come to school remain on the other door; washroom

Imagination Station: a table which holds craft supplies and a couple of chairs; a sink at which is used for washing up after messy activities and for washing hands before meals, after washroom
Writing: a table which holds writing supplies: notepaper, scissors, pencils at which children (three to four) can write and/or make paper projects

Computer: a computer work station consists of two PCs is across from the writing/imagination stations

Table/work: this is the largest area and consists of three large hexagonal tables at which the children sit for activities such as writing and drawing in their journals, drawing and coloring at open time, and having snacks and lunches

Reading, puzzles, Lego: this area consists of a small sofa with pillows on which three or four children can sit, a couple of book cases with books and puzzles, and a book rack that displays books. This area is often used for Lego building which is housed on a bookcase “next door”

Kitchen, theatre, building: there is a small area which is used for storing building blocks and Lego next to the kitchen so that building blocks can overflow into the house/kitchen play floor area. The kitchen has a table, shelves, stove, cupboards, pots, pans, dishes and food. The back of the table makes the side of a puppet theatre.

Meeting and general play: this area has a white board, flip chart and is most like a regular classroom that the children will move into in upper grades. The day’s schedule is written on the board here and the teacher holds her lessons here. During free play some of the larger toys such as the car garage and the marble tower are put in this area. This area also holds the “helper” chair, a comfortable child-sized sofa chair used by the day’s “helper.”
Appendix F. Children’s Narrative Resources

Harvey Darton’s *Children’s Books in England* and Cornelia Meigs’ *A Critical History of Children’s Literature* provide a historical account of children’s literature citing classics that are considered good books, books that capture the world for children as well as capturing their imagination. There are in addition resources such as Cullinan and Galda’s *Literature for Children*, intended for teachers, and Michele Landsberg’s *Guide to Children’s Books*, written for all, that can be referenced when looking for recommended books. Barnes and Nobles, one among other book publishers that compile lists of good children’s books, publishes *Guide to Children’s Books*. As well, each year, local newspapers, and magazines make an effort to provide a list of what are considered the best books of the season.

A number of resources are available to parents for information on past and current award winning books for different age groups. A list of these resources is available at The Children’s Literature Web Guide which has been compiled by David Brown at the University of Calgary. Though not updated recently, this site is worth visiting as it provides extensive links to internet sites connected to children’s literature. The site can be accessed at http://www.ucalgary.ca/~dKbrown/awards.html. The awards page provides the following information:

- **International Awards:** H. C. Anderson Medal, Phoenix Award
- **Canadian Awards:** CLA Book of the Year, Governor General’s Awards
- **United States Awards:** Newbery Medal, Caldecott Medal
- **British Awards:** Carnegie Medal, Greenaway Medal
- **Australian Awards:** Book of the Year (Older Readers), Picture Book of the Year
- **New Zealand Awards:** Esther Glen Award, NZ Post Children’s Book Awards
- **Children’s Choice Awards:** Young Reader’s Choice Award, I & J Black Award
- **Best Books of the Year Lists**
Bibliography


Madej, Krystina. *At Home with Games*. Surrey: School of Interactive Arts and Technology, Simon Fraser University, 2007.


---. *The Dynamic of Young Children's Emerging Narrative Process*. Surrey: School of Interactive Arts and Technology, Simon Fraser University, 2006.


