In the Heart of the Hidden Figures

The alteration of representation in young readers' editions of adult nonfiction novels.

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Introduction

In 2016 it was announced that there was going to be a young adult (YA) adaptation of Dan Brown's *The Da Vinci Code*. The American newspaper *The Guardian* asked the intended audience of teenagers and young adults whether they felt pleased with this news or found it to be patronizing. Some of the people responding to the article in *The Guardian* asked why it was necessary to publish a young adult adaptation of *The Da Vinci Code*. Several of them had read the popular page-turner at age twelve without any problems. Many of the teenagers and young adults, but also YA authors, replied that they found the appearance of such an adaptation to be patronizing for the readers as well as the genre, since it suggested that the YA novel is a "dumb down version" or a "simplified fiction" of its original. Before the YA adaptation of *The Da Vinci Code* had been published, it was already assumed that the rewrite would result in a simplified version of the original.

Young adult (and young readers') adaptations of nonfiction novels, on the other hand, seem to be more appealing and more acceptable. The magazine *Publishers Weekly* featured an article on their website titled "Young readers' editions on the Horizon", which said: "Young readers' adaptations of adult nonfiction titles have grown exponentially in recent years, […]. Booksellers have told *PW* [*Publishers Weekly*] anecdotally that the titles are more popular than ever, with some adults purchasing the titles ostensibly for themselves as well". And the editorial book site *Book Riot* introduced its compiled list of "15 YA Adaptations of Best-Selling Adult Nonfiction" in the following way: "As nonfiction has become an increasingly important part of the school curriculum, the book industry has responded by putting out more titles […] and adapting popular adult nonfiction for young readers". These adaptations are made for educational purposes. They are more than just a marketing-scheme to sell more books. Their purpose is to teach their young audience about the world and its history; to inspire them by informing them of the struggles and achievements of others; to awaken their interests in certain subjects.

However, even the more accepted adaptations of nonfiction novels raise the question "why?". Are the original novels so very incomprehensible for young readers that they need to be rewritten for a younger person to understand them? Do they contain any inappropriate content for readers of a young age? Is it that necessary for them to read the novel at a young age that they cannot wait until they are older? Without knowing more about the changes that are made to the novels in order to create the young readers' adaptations, it is difficult to comment on their existence. This is, therefore, the question with which I will start my research: what changes are made to adapt adult nonfiction novels for young readers? I will be looking mainly at the use of language, the contents of the narrative and any potential use of fictional elements in two works of nonfiction adapted for a youthful readership.

The adaptations are made to make the knowledge and representations of historical events more accessible to young people. Because of this intention, simplification might actually be considered positive instead of patronizing in the eyes of the public and the young reader. I find it interesting to analyse *how* these texts have been simplified and made more accessible. A nonfiction author doesn't have as much freedom in writing as an author of fiction. Nonfiction novels contain subjective representations of reality, of events that have actually taken place in the real world. The author must remain as close to the known facts as possible. This constraint makes me wonder whether the subjective representations of the events and characters, too, change when an adult nonfiction novel is adapted for young readers, and if so, in what way? This will be the main question of my research.

I choose two nonfiction novels to analyse: *In the Heart of the Sea* by Nathaniel Philbrick (2001) with its adaptation of 2015, and *Hidden Figures* by Margot Lee Shetterly (2016) with its adaption of 2016. I choose these particular two novels because they seem to be very dissimilar. First of all, the authors have a different ethnic background and belong to a different sex, Shetterly being a female African American author from Virginia and Philbrick a male American from Massachusetts.

Secondly, and more importantly, both novels seem to address a different audience. Philbrick's novel is more likely to appeal to a male audience, whilst Shetterly's novel is more likely to appeal to a female (African-American) readership. Philbrick writes about the masculine world of whale-hunting and his novel consequently contains only male protagonists. He writes about their struggle to survive their shipwreck caused by an aggressive whale and the horrors they face on their journey. Shetterly's novel, on the other hand, tells the story of four black women working as mathematicians for NASA. She writes about their confrontations with sexism and racism and about their achievements, celebrating their emancipation. Hence, both novels have different implied readers, male and female respectively. This implied reader changes (at least in age) along with the creation of the adaptations. The notion that one implied reader is male and the other female raises the additional question of how the gender of the implied reader might affect the adaptations.

I would like to stress that there is a slight difference in the ages of the implied readers of both young readers' editions. *Hidden Figures* is aimed at readers between the ages of eight and twelve years old, whilst *In the Heart of the Sea* is aimed at ages ten and older. This might also have had an influence on the creation of both adaptations. Because of the specific age groups targeted by these two texts I will be referring to their readership as 'young readers' instead of 'young adults'. As Michael Cart explains, the term 'young adult' embraces readers from twelve to eighteen years old and has even started to include nineteen- to twenty-five-year-olds (139). However, Cart proposes to replace this too broad category by two new categories. He suggests labelling literature for twelve- to eighteen-year-olds as *Teen* and to categorize literature for eighteen- to twenty-five-year-olds as "young adult or new adult" (140). As the age of the implied readers of my two chosen novels does not strictly coincide with either category, I will refer to 'young readers' and 'young reader's editions'.

A last difference between both novels concerns their genre and the authors' research. *Hidden Figures* is most often classified as a biography, whilst *In the Heart of the Sea* is labelled as history. Shetterly was able to do interviews with some of her women protagonists in the novel and with people who had been close to them. Her father had worked for NASA as well and therefore

knew some of these people. Shetterly was thus able to hear the stories first-hand. Philbrick, on the other hand, only had written reports and narratives of the survivors to go on. The accounts by first mate Owen Chase and cabin boy Thomas Nickerson were penned down with the help of others who had more writing experience. They used ghostwriters. Philbrick even stresses in his novel that both men had adjusted their accounts to suit their own purposes.

Both novels are historical. However, *In the Heart of the Sea* is also an adventure story that turns into a journey of survival and a tragedy. *Hidden Figures*, meanwhile, is a biography, a story of emancipation and a history of air- and space travel combined. Both novels thus differ considerably from each other, not only with regard to their respective authors, but also with regard to genre, implied reader and even research method.

However, there are also some similarities between them. Both adult versions were written in the twenty-first century, *In the Heart of the Sea* first appearing in the year 2000 and *Hidden Figures* in 2016. Both novels have also been on the *New York Times* bestseller-list and were adapted to film. The two young readers' editions were published in 2015 and 2016 respectively, within a timespan of only a year, and were written by Philbrick and Shetterly themselves.

The first chapter of my thesis will focus on the differences between Philbrick's novel *In the Heart of the Sea* and its young readers' edition. In contrast to the original edition, the adaptation emphasises that it is based on a true story. In order to find an explanation for this difference I will make use of a theory by Christina Olin-Scheller and Michael Tengberg about faction literature and its reception by young readers. An interesting aspect of *In the Heart of the Sea* is that the narrative contains several passages concerning death, the killing of both animals and humans, and cannibalism. These subjects and their rather detailed descriptions may have been considered inappropriate for young readers. I will analyse the way the adaptations have altered these passages if they were not omitted altogether. In doing so, I draw on an article by Michele D. Castleman and Erin F. Reilly-Sanders on the representation and complication of killing in young adult novels. I will argue that although Philbrick's novel and its adaptation are based on historical facts, Philbrick chose to

represent the events as a tragedy. In order to define the relationship between his style and the genre of historical writing I will take inspiration from two articles by Hayden White on this subject. Throughout the chapter, as in the other two, I will be referring to Perry Nodelman's research on children's literature in *The Hidden Adult.*

The second chapter will center on Shetterly's *Hidden Figures* and its young readers' edition. Perry Nodelman's research on children's literature and Hayden White's ideas about the use of technical language will be applied to compare the adaptation techniques found in *Hidden Figures* to those used in *In the Heart of the Sea*. My analysis of the young readers' edition of Shetterly's novel will focus mostly on the simplicity of its style, and how this has affected the representation of the events. In contrast to the original novel the adaptation contains several pictures which, in my view, add some complexity to the text.

The third chapter will focus on the implied reader and how this textual agent creates meaning according to Wolfgang Iser. I will apply Iser's theory and Nodelman's research on children's literature to both adaptations and compare the implied readers of both adaptations. In this chapter I will also discuss how the simplifications of the adaptations have affected the representation of the heroism of Philbrick's male characters and Shetterly's female characters, and what influence the gender of the implied reader has had on these character representations.

I will end my thesis with a conclusion where I will summarize my findings and present an answer to my main question: how, judging from these two comparative analyses, does the subjective representation of events and people change when an adult nonfiction novel is adapted for young readers?

In the Heart of the Tragedy

Chapter One

1.0 Introduction

"It is a tragedy that happens to be one of the greatest true stories ever told" (160). This is the very last sentence of the young readers' edition of Nathaniel Philbrick's *In the Heart of the Sea*. The original adult edition of the novel ends a page and a half further on with a less gripping and more gruesome statement: "But, as the survivors of the *Essex* came to know, once the end has been reached and all hope, passion, and force of will have been expended, the bones may be all that are left" (238). This sentence has a much more tragic feel to it than the first one. For the first ending gives the tragedy a sense of glory and a positive spin: it did provide the world with an amazing story. The last ending, however, lends a less positive note to the conclusion, suggesting that the story could have ended with the deaths of the entire crew, with nothing remaining but their bones. This epic story, then, would have died with them, as well. This suggests that it is not considered wise to end a story for young readers with the notion of a horrible death.

Philbrick bases his novel on the reports of the sinking of the whaler *Essex* left by first mate Owen Chase and cabin boy Thomas Nickerson. Whilst a part of the crew was out hunting for whales, the Nantucket whaleship got rammed by a large sperm whale, which caused it to sink. The crew on board at that moment – including Chase and Nickerson – managed to get into the remaining whaleboat with a few supplies. Left with three boats afloat (under the command of Pollard, Chase, and Joy/Hendricks, respectively) the *Essex* crew gathered what supplies they could from the floating wreck, made a plan and set sail for South America. During their three months at sea, they were faced with the hardships of hunger and thirst, and the dangers of the Pacific Ocean[1]. Only eight out of the twenty crew members survived (number twenty-one having deserted). Five of these had been forced

[1] A map showing the voyage of the *Essex* up until the shipwreck as well as a map showing the voyage of the *Essex* whaleboats after the shipwreck can be found in the appendix; together, these provide a summary of the events combined with their location and date.

to eat the dead bodies of their shipmates. All in all, these events made for a spectacular story, so spectacular that in 2015 it resulted in a film adaptation directed by Ron Howard.

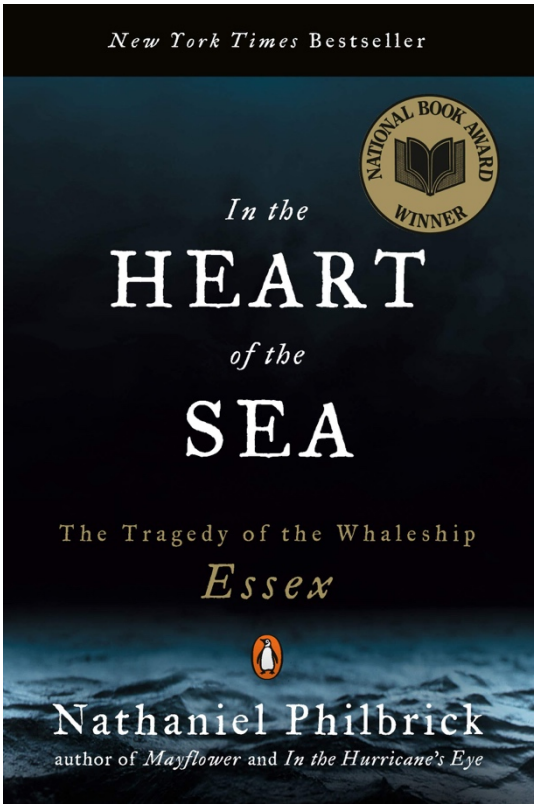
Philbrick, however, adorns the story of the *Essex* with comparisons to other ship-related tragedies (the wreck of the *Medusa*, the mutiny of the *Bounty*, etc.), background information about whaling and the Nantucket life, explanations of the strange occurrences and torments that befell the crew, and references to other sources besides Chase and Nickerson.

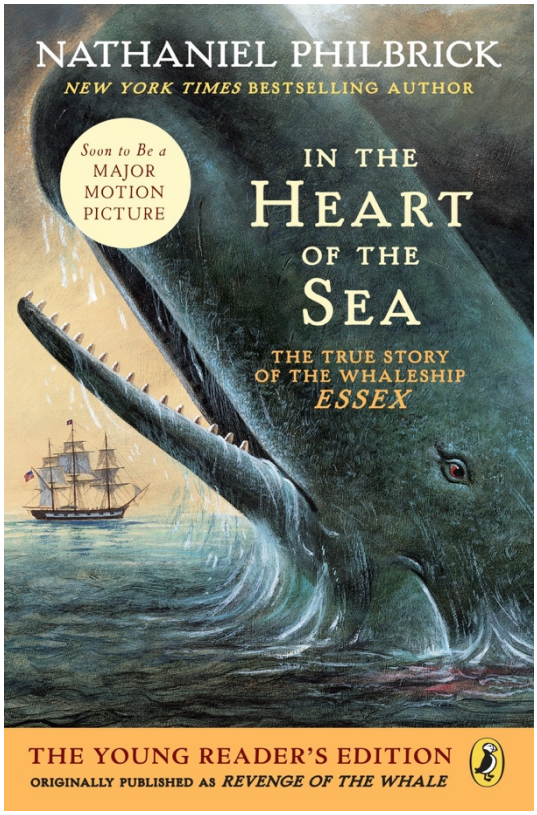
Of course, the differences between the two editions of Philbrick's story do not only concern the final sentences. If that were the case, there would have been no need for a young readers' edition at all. So, what other changes have been made to create a young readers' edition?

In this chapter, I will be comparing the young readers' edition of *In the Heart of the Sea* with the original, adult edition. My analysis will concern both the content of the narrative and its style. I will be asking questions such as: "why does the young readers' edition emphasize that it is a true story?" and "how have killing and cannibalism been represented in both novels?". I will also be discussing the fictional elements Philbrick has used in his novel, how these relate to the genre of the tragedy, and how they have impacted the young readers' edition. All these questions will contribute to answering my main question: how does the representation of events and characters change when an adult nonfiction novel is adapted for young readers?

1.1 The True Story

Let us begin with the most obvious alterations: the changes made to the cover. First of all, the young readers' edition has a more richly illustrated cover. Where the adults are to be enticed by a dark front with some water depicted at the bottom, the youngsters are treated to a drawing of a large whale emerging from the sea, with a ship in the background. The water is dark, but the sky has a soft yellow colour. This picture makes the story seem less grim. The only sign of a possible tragedy, besides the whale, is the dark red colour of the water. The adults' cover, on the other hand, shows tragedy all over its dark and lurid cover design:





Both editions contain a subtitle on their cover. The adult edition reads: "The Tragedy of the Whaleship *Essex*". Again, the publishers are highlighting the tragic aspect of the story. The young readers' edition, however, reads: "The True Story of the Whaleship *Essex*".

On the back cover of the young readers' edition it is also emphasised that this is a true story. In yellow lettering it says: "The incredible true story of the epic adventure – and harrowing disaster – that inspired *Moby Dick*". This edition really wants its reader to know that it is a *true* story, while on the back cover of the adult edition it is just called "an epic tale". Why does the young readers' edition put so much emphasis on the truth of the story?

In their article "'If It Ain't True, Then It's Just a Book!'", Christina Olin-Scheller and Michael Tengberg examine the issues of reading and teaching faction literature, that is, literature based on a true story. Because this literature is only *based on* a true story, it is allowed to bend the facts a little so they might fit better into the intended narrative or to add fictional elements, something which isn't allowed in nonfiction. These faction texts, then, contain a mixture of fact and fiction.

Olin-Scheller and Tengberg argue that "the relationship between the texts and facts of life is not only an issue of genre. It is also established by the form of reading applied by the reader" (153). They focus on how a work of literature will be received differently by young readers than by adults. Young readers have different expectations and interpretations. They do not have the same knowledge as an adult. Thus, Olin-Scheller and Tengberg claim, young readers often treat fictional novels "as if they explicitly portrayed real life, or even as if they were documents of 'true facts' or of 'true stories'" (154).

This mistake also leads to some "critical dilemmas" concerning the reading of faction literature. One of these dilemmas is that young readers will easily mistake a fictive character "for being equivalent to characters of flesh and blood" (165). This confusion will then compromise their literary understanding, resulting in their acceptance of even traditional fiction as historical truth. After all, according to Olin-Scheller and Tengberg, teenagers have a desire for "acquiring accurate knowledge about extraordinarily tragic or violent human destinies", which seems "to have a major impact on their literature selection and literary interaction" (165).

Faction literature, literature based on a true story, is allowed to be liberal with the truth, but in adaptations for young readers, this principle is likely to result in readers acquiring inaccurate knowledge if they are not expressly informed about the fictional aspects of the work. This, in Philbrick's adaptation, might well explain the explicit announcement of the nonfiction genre the reader is about to engage with. By clearly announcing that *In the Heart of the Sea* is a *true story* instead of being *based on* a true story, the (young) reader can safely and justly assume that the knowledge presented by the novel is accurate and that the representation of the historical reality is as accurate as possible.

We can see a similar difference in the adaptation of Shetterly's *Hidden Figures*. On the front cover, the adult edition speaks of "the untold story", whilst the young readers' edition advertises the same narrative as "the untold true story", with the words "true story" in a different colour and in a

larger and bolder font. So once again, there is the emphasis on the non-fictionality of the novel, meant to take away any confusion there might arise between fact and fiction.

However, like faction literature, nonfiction is not free of fictional elements. The presence of fictional elements is unavoidable even in historical writing. I will discuss this further in section 1.4 "Tragic History".

1.2 Actions and Consequences

Looking at the contents of *In the Heart of the Sea* and its adaptation, I notice several changes. Two chapters in the young readers' edition, Chapters Four and Eight, have been given new titles, and the subtitle "Bones" has been added to the epilogue. Another noticeable difference is that the young readers' edition is seventy-eight pages shorter, even without counting the missing pages with notes, bibliography and acknowledgements, which means that a sizeable portion of the story has been omitted. To get a sense of what elements have been left out, let me start by examining Chapters Four and Eight, since the alterations made to these chapters have even resulted in different titles.

In the young readers' edition, Chapter Four has been renamed "Into the Pacific", the original bearing the title "The Lees of Fire". The chapter has been reduced from fifteen to five pages. Only Chapters One and Fourteen have larger reductions. So, what has been left out?

What has been omitted is mostly background information and parts of the narrative that are not directly relevant to the understanding of the story in hand. These are passages where the author tends to drift off from the main storyline. In these missing parts the reader is informed of the dangers and troubles of rounding Cape Horn as experienced by the crews of the *Bounty* and another ship named *Essex*; of the distressing political situation in Peru; of the experiences of the green hands (first time crew members) whilst getting acquainted with the ship and whaling, including some whaling trivia. The bulk of what else has been left out (amounting to about seven pages in the adult version) relates how the crew passes through the Galapagos and stop on one of the islands to go and collect tortoises, which were apparently valued by sailors because they could survive for more than a

year without food or water. The young readers' edition even leaves out the passage where boatsteerer Thomas Chappel sets fire to an island, thereby contributing to the extinction of an entire species of tortoises. These events are summarised in one sentence and transferred to the next chapter: "After stopping there [the Galapagos Islands] to stock up on provisions, including giant turtles, they were following the equator as if it were an invisible lifeline leading the ship even farther into the largest ocean in the world" (44).

Similar changes can also be found in Chapter Eight. The title, changed from "Centering Down" to "Thirst", more accurately represents the chapter's topic. Its equivalent in the adult edition contains a reference to the historical wreckage of the French ship *Medusa*. Only fifteen out of a 150 passengers survived, after they fought each other over a few cases of wine. The crew members of the *Essex* knew better than to fight over their provisions. Trying to make their stock last as long as possible, they kept cutting their rations by half, which eventually caused them to suffer (and die, in many cases) from hunger and thirst.

The harrowing story of the *Medusa* has been left out of the young readers' edition. That Pollard's boat gets separated from the other two boats for a short while and how the others respond to this mishap is not mentioned either, nor is the ecological explanation of why there is no life (fish) to be found in the "Desolate Region" of the Pacific Ocean. What these parts have in common is that they are not strictly necessary for an understanding of the *Essex*'s history. They are not directly related to the tormenting experiences of the crew's hunger and thirst.

However, a passage that has been left in is the discussion of research into stages of dehydration by W.J. McGee published in 1906. Philbrick uses this research to explain the gruesome effects of dehydration on the bodies of the crew members, which helps the reader to understand how horrible the situation must have been for the men. Even though the research of McGee concerns the chapter's topic of thirst, it is still background information that interrupts the story of the *Essex*. That is to say, the tale of the *Essex* could have been told without this information.

In his study *The Hidden Adult: Defining Children's Literature* Perry Nodelman analyses the genres of children's and young adult literature. In his analysis of six different texts belonging to these genres he outlines several characteristics that set them apart from adult literature. One of these concerns the focus on action rather than experience: "The focus [of the text] is on what happened and what it then led to, not on what it looked like or felt like as it was happening – on actions and consequences rather than on the detailed textures of felt experiences" (10). Philbrick's mention in the adaptation of McGee's research in order to describe how the crew of the *Essex* would have suffered could be seen as either an attempt to convey the felt experience of thirst, or to explain the consequence of an action, namely the cutting of rations. The latter view might explain why it was preserved in the adaptation, whilst the former would have been a reason to take it out, as was done with other sections that were excluded from these two chapters. Unlike the McGee research, these omitted sections are not about the actions and consequences leading directly to the death of most of the crew members and the survival of a few.

This thinning out of the story isn't restricted to Chapters Four and Eight. Every chapter has been combed through to excise such 'unnecessary' parts. What is left in the young readers' edition, then, is an almost exclusive focus on the actions and consequences leading to the sinking of the ship and the deaths of most of the crew members.

1.3 "Not a Whale or a Hog or a Tortoise"

One expectation I had concerning the young readers' edition of *In the Heart of the Sea*, was that anything violent, bloody, or gruesome – so, anything that couldn't be considered age-appropriate – would have been deleted. In some cases, this was indeed done, in others it was not. When it comes to the hunting and stripping of the whales, there are small alterations. Consider, for example, the following passage from the original, adult edition:

> When the lance finally found its mark, the whale would begin to choke on its own blood, its spout transformed into a fifteen- to twenty-foot geyser of gore that prompted the mate to

> shout, “Chimney’s afire!” As the blood rained down on them, the men took up the oars and backed furiously away, then paused to watch as the whale went into what was known as its flurry. Beating the water with its tail, snapping at the air with its jaws – even as it regurgitated large chunks of fish and squid – the creature began to swim in an ever-tightening circle. Then, just as abruptly as the attack had begun with the first thrust of the harpoon, it ended. The whale fell motionless and silent, a giant black corpse floating fin-up in a slick of its own blood and vomit. (54)

This very graphic description of a whale dying in a horrific way was not changed by a single word in the young readers’ edition. Now, let us compare this to another passage. When Lawson Thomas dies, the crew in that boat (left under the command of Hendricks after Joy’s death) and Pollard’s boat decide to eat his body instead of throwing it overboard as they had done with the body of Matthew Joy. When it actually comes down to butchering the body, Philbrick writes the following:

> The crew of the *Nottingham Galley*, […], had found it so difficult to begin the gruesome task of cutting up the carpenter’s body that they pleaded with the reluctant Captain Dean to do it for them. […] Dean, like most sailors forced to cannibalism, began by removing the most obvious signs of the corpse’s humanity – the head, hands, feet, and skin – and consigned them to the sea.
>
> If Hendricks and his men followed Dean’s example, they next would have removed Thomas’s heart, liver, and kidneys from the bloody basket of his ribs. Then they would have begun to hack the meat from the backbone, ribs, and pelvis. In any case, Pollard reported that after lighting a fire on the flat stone at the bottom of the boat, they roasted the organs and meat and began to eat. (165-166)

Both of these paragraphs were completely omitted from the young readers’ edition, as opposed to the whale-killing scene. In comparison to that scene, the butchering of Lawson Thomas in the adult edition is described in a less repugnant way. The whale-killing scene contains expressions like “choke on its own blood”, “geyser of gore”, “regurgitated large chunks”, and “thrust”. The repeated use of

hard-sounding consonants like g-, ch-, and r-, visualises violence, torment, and pain. The whale gets to die in a most undignified and unsavoury manner. The only truly violent-sounding and dehumanizing words used in de paragraphs on Thomas, are “hack” and “the bloody basket of his ribs”.

Another depiction similar to that of the whale’s death that can be found in both editions occurs when Chase’s crew decide to eat one of the tortoises to ease their hunger:

> […] at one o’clock that afternoon, Chase’s dissection began. First they flipped the tortoise on its back. As his men held its beak and claws, Chase slit the creature’s throat, cutting the arteries and veins on either side of the vertebrae in the neck. Nickerson claimed that “all seemed quite impatient of the opportunity to drink the blood as it came oozing from the wound of the sacrificed animal”.
>
> […] Chase inserted his knife into the leathery skin beside the neck and worked his way around the shell’s edge, cutting with a sawing motion until he could lift out the meat and guts. […] they kindled a fire in the shell and cooked the tortoise, “entrails and all”. (original edition 117-118)

The crew are not being gentle with the tortoise. Nickerson may call it the “sacrificed animal”, but again there is no dignity in the creature’s death. When ‘dissecting’ Thomas’ body Philbrick uses few details as to how this was done. There is no mention of “a sawing motion” or roasting him “entrails and all”. Besides, Thomas has “organs” instead of “entrails” and “guts”. The crew is not reported to be impatient to drink the blood that comes oozing out of him. Compared to the killing of the whale and the dissecting of the tortoise, the description of the cutting of Lawson Thomas isn’t that unsavoury and gruesome. Only once they have removed his “humanity” is there talk of “hacking” and “the bloody basket of his ribs”. This last metaphor is arguably the most dismal image in the whole scene. But then, out of the three passages, why was precisely this one left out in the adaptation?

Michele D. Castleman and Erin F. Reilly-Sanders have studied how young adult fiction complicates the act of killing in order to encourage reflection, discussion, and interrogation of such

violence. Noticing how these young adult novels elaborately describe the choices and consequences the protagonists have to face, they find that this strategy allows the reader to take up a critical position towards the events and question them of their own accord. In the article they refer to the young adult novel *Revolver* by Marcus Sedgwick[2] and how the character Sig is faced with the chance to kill his antagonist Wolff:

> In the end, Sig takes a middle approach in which he is responsible for Wolff's death but does not kill him with the gun. Instead, he uses indirect means, allowing Wolff's own actions to contribute to his imprisonment and eventual death.
>
> By including extensive and deep consideration over the choice to kill, this sample allows room for reflection [by the protagonist]. These reflections take up more space on the page, and thus require the reader to spend more time reading about the killing and interrogating it. This period of inquiry can happen either before or after the event. (57)

Strategies that may be used to encourage the reader to "take a critical or analytical perspective when reading about killing", according to Castleman and Reilly-Sanders, are to place the protagonists in "positions where they must kill"; to have them choose only "to kill people whom they believe deserve it"; to have them "reevaluate their identities as killers"; to have them "rationalise their determination to kill"; and/or to have their "expressions of guilt demonstrate they are good people despite their deeds" (54).

It seems to me that, by taking out the cutting up of Thomas's body, the room for critical reflection on this act of cannibalism in the adaptation is diminished. Of course, the crew themselves did not cause the death of Lawson Thomas, but to them, eating a human body is just as bad as having to kill a fellow human.

In Chapter Eleven of his adult edition, "Games of Chance", Philbrick seems to apply various strategies mentioned above to encourage critical reflection. The crew find themselves in a position where the choice is between eating Thomas or dying themselves. Then, by referring to other cases of

[2] Sedgwick, M. *Revolver*. New York: Roaring Brook Press, 2010.

survival cannibalism (the *Nottingham Galley,* the *Peggy,* and others) and by mentioning that it was almost expected of survivors to resort to cannibalism, Philbrick rationalises the actions of the *Essex*-crew. He also emphasises the emotional struggles which their act of cannibalism causes the crew, though they show more sorrow than guilt. The difficulty they have with having to butcher the body already demonstrates that they would rather have it any other way. All these elements enable a possibility for critical reflection and make sure that the act will not go unnoticed by the reader. These elements have been omitted from the young readers' edition and the adaptation, therefore, lacks the critical reflection made possible by these elements.

When, later, the members of Pollard's boat are reduced to casting lots to see who will be killed for food, which results in Charles Ramsdell having to shoot Owen Coffin, their guilt does become more apparent, because this is not a natural death (unlike those of the others who have already been eaten) but an execution. The traumatic act of casting lots has not been taken out of the young readers' edition, whilst this is an actual case of killing instead of only eating.

The guilt that Captain Pollard experiences due to the death of his cousin Owen Coffin is apparent when he offers to take his cousin's place. Ramsdell, at first, also refuses to shoot Coffin, even though the lottery was his idea. Later, Pollard, on his return to Nantucket, has to confront Coffin's mother, his aunt, and pass her the message left by her son. About Nancy Coffin's reaction Nickerson writes in his report: "[S]he became almost frantic with the thought, […] and I have heard that she never could become reconciled to the captain's presence" (young readers' edition 144). The response of the community is quite different. To them "the drawing of lots was accepted by the unwritten law of the sea as permissible in a survival situation" (young readers' edition 144-145). Again, the act of casting lots to see who is to die and be eaten, ordinarily considered to be unacceptable, is rationalised by the notion that it was customary in such exceptional cases. That Pollard's crew weren't the only ones to resort to it, makes cannibalism a little more acceptable. But their haunting experience of guilt and Nancy's anger towards Pollard clearly emphasise how complicated this killing was.

To come back, then, to the description of how Lawson Thomas' body was butchered, it seems to me that leaving this part out decreases the gravity of the act. What is left in the adaptation is the following observation:

> But this was not a whale or a hog or a tortoise. This was Lawson Thomas, a shipmate with whom they had shared two hellish months in an open boat. Whoever butchered Thomas's body had to contend not only with the cramped quarters of a twenty-five-foot boat but also with the chaos of his own emotions. (115)

There is no speculation here about how the butchering might have been done or who might have done it. In the adult edition, however, Philbrick does speculate about how they might have gone to work in cutting up the body, by referring to a similar case (the story of the *Nottingham Galley*). Yet, by explaining how they might have removed "the most obvious signs of the corpse's humanity" (165), he convincingly emphasises that, no matter how it was done, it would still have been an extremely hard and difficult task, even though it was necessary for their survival and commonly acceptable in their situation. By contrast, the young readers' edition cuts directly to the aftermath of the crew's eating the body: the increase of their hunger.

However, this does not mean that there is no reflection there whatsoever. By preserving the description of the emotional struggle, the adaptation still shows that this wasn't a thoughtless or easy decision to make. What has happened is that the adaptation diminishes the emphasis on the gravity of the act by paying less attention to it, so that the passage offers less opportunity for taking on a critical or analytical perspective when reading about it. The less attention is paid to the act of cannibalism, the easier it is forgotten. This seems to be the goal here. You would not want a young reader to remember these brave men as cannibals, but as survivors. This is the most important effect the adaptation has on the representation of the *Essex*-story: it increases the crew's heroism and diminishes their horrors. Killing 'mere' animals like the whale and the tortoise does little damage to their heroism. Hunting whales is just their job and the killing of animals such as the tortoise for food is broadly accepted. Leaving in the descriptions of these animals' gruesome slaughters, Philbrick may

well have argued, would not harm the representation of the Nantucket heroes, even though it might result in nausea for the youthful reader.

1.4 Tragic History

In the first section of this chapter, I discussed how the young readers' editions of *In the Heart of the Sea* and *Hidden Figures* emphasise that they are "true stories". I mentioned the dilemma facing young readers of faction literature as noted by Olin-Scheller and Tengberg that could explain this emphasis. They also discuss another dilemma. According to them, young readers favour truthful representations of the real, which "tend to complicate their interaction with texts that do not align with these standards" (166). When a work of literature that suggests to be factual diverges too much from the young reader's notion of realism, or when a work contains to many "poetic qualities", it is quickly regarded as not 'trustworthy' or 'strange'. So, an abundance of overtly fictional or poetic elements doesn't appeal to young readers and makes them discard a story as unbelievable.

However, a historical nonfiction novel cannot be free of fictional elements and poetic qualities: "Properly understood, histories ought never to be read as unambiguous signs of the events they report, but rather as symbolic structures, extended metaphors, that "liken" the events reported in them to some form with which we have already become familiar in our literary culture" (White, *Tropics of Discourse* 91). While writing down the story of the *Essex*, Chase and Nickerson already altered their accounts (which were written with the help of ghostwriters) to suit their own purposes. According to Philbrick, Nickerson claims the men did not eat the body of Isaac Cole but survived on the extra bread made available after the deaths of the others (original edition 229). And about Chase's narrative Philbrick writes: "It would be difficult for any reader of Chase's book alone to appreciate the true scope of the disaster. […] By keeping many of the most disturbing and problematic aspects of the disaster offstage, Chase transforms the story of the *Essex* into "a personal tale of trial and triumph" (original edition 204). What Philbrick himself, by comparison, does with his narrative, is to turn it into a tragedy. In the original edition, he regularly highlights the tragic

elements by mentioning the mistakes the crew made in their navigation and decisions, combining his account of these errors with the question how many lives might have been saved, if only…

Philbrick makes use of several poetic elements in both editions of the novel. More than once does he apply metaphors or irony. It was Hayden White who stated that it is almost impossible to write about history without applying the techniques also used in fictional narratives:

> In the passage from a study of an archive to the composition of a discourse to its translation into a written form, historians must employ the same strategies of linguistic figuration used by imaginative writers to endow their discourses with the kind of latent, secondary, or connotative meanings that will require that their works be not only received as messages but read as symbolic structures. […] The kind of interpretation typically produced by the historical discourse is that which endows what would otherwise remain only a chronologically ordered series of events with the formal coherency of the kind of plot structures met with in narrative fiction. This endowment of a chronicle of events with a plot structure, which I call the operation of emplotment, is carried out by discursive techniques that are more tropological than logical in nature. (*Figural Realism* 8)

By "latent, secondary, or connotative meanings", White means those symbolic, underlying meanings which emerge in the act of interpretation. To be able to endow a work with such potential for generating surplus meaning it is unavoidable to make use of tropological techniques like metaphors, metonymy and irony. Otherwise, what would remain is a chronologically ordered series of events with no guiding sub-text.

The sub-text in Philbrick's novel, then, would be that, due to the crew's own mistakes, the story of the *Essex* is a tragic one, where what was once desired, becomes their misfortune. This is what Philbrick ironically points out: "The boats became slippery and dangerous to move around in. The fluid [whale oil] that only a few days before had been their fortune, their obsession, was now their torment" (original edition 95); "Without their ship to protect them, the hunters had become the prey" (original edition 116); "It was a black night, and the noise that had once signalled the thrill of

the hunt now terrified them" (original edition 162). The tables have been turned on the *Essex*-crew. The sea that once formed their livelihood has become their biggest threat.

In addition to such ironic contrasts, Philbrick also makes use of metaphors: "the *Essex* looked like the web of a giant rope-spinning spider" (original edition 29); "Like a string of ducklings trailing their mother, they spent the night in the lee of the ship" (original edition 90). Because of Philbrick's limited use of metaphors and of irony these figures do not really stand out in his text. They are mostly used to explain something more clearly and to enhance the reader's experience of the situation. For Philbrick doesn't just want to relate the story of the *Essex* to his readers, he also wants the story to be compelling. The application of these tropes, then, convey the secondary subtext of his narrative concerning the tragedy and the triumph of the *Essex*-crew. Without them, this secondary meaning would be absent or easily overlooked. The use of tropes is what makes this story a tragedy, not the events themselves. For according to White those historical events are value-neutral, and he is right. In Philbrick's point of view the events of the *Essex* are tragic, but someone else might consider them to be comical and represent them as such. Another person might find the story of the *Essex* of no importance whatsoever, a tale not worthy to tell. Events are value-neutral until we try to represent them. That is when their value is assigned.

Most of the irony and metaphors used are preserved in the young readers' edition. They have only been left out where the events related were removed as well. Perhaps their presence may cause the young reader to be less convinced of the truthfulness of the story, as Olin-Scheller and Tengberg have warned. However, due to their limited use, that seems unlikely. It might even be argued that the use of these fictional elements is acceptable because the novel already emphasises that this is a true story. There can be little confusion between fact and fiction anyway, and therefore a limited use of fictional elements will not affect the trustworthiness of the narrative.

Despite the fact that Philbrick has kept the metaphors and the irony in, the adapted novel remains the tragedy he intended it to be without affecting the trustworthiness of the account. To be sure, he left out or glossed over some of the horrors committed or experienced by the crew, and

content that doesn't focus on the actions and consequences of whale hunting or surviving at sea. However, although these changes result in the young reader only receiving a partial experience of the events related, the subtext of the story remains largely unchanged.

1.5 Conclusion

In my comparison between the original edition of Philbrick's *In the Heart of the Sea* with the young readers' edition, I have argued that the adaptation emphasises that it is a true story in order to prevent any confusion between fact and fiction.

Another aspect of the adaptation that I have noticed is the focus on actions and their consequences. This focus resulted in the elimination of many references to experiences, descriptions and background information, unless these were directly relevant to an understanding of the narrative. The adaptation excises the 'unnecessary' passages, which leaves us with an almost exclusive focus on the actions and consequences leading to the sinking of the ship and the death of most of the crew-members.

The young readers' edition problematizes killing less than the original novel does. The original edition elaborately represents the killing of animals as well as the killing of humans and cannibalism. Whilst the killing and eating of animals is presented as a normal practice, the killing and eating of humans is not. The novel pays a lot of attention to the latter issue by describing the emotional impact and the guilt that comes with the act. It rationalizes yet also problematizes the decisions of the crew-members, which lends the reader the opportunity to critically reflect on the killing and the cannibalism. The young readers' edition, however, reduces this possibility for reflection by omitting many passages related to the gruesome acts of killing and cannibalism, unlike the passages about the killing and eating of animals, which have not been altered in the least. Admittedly the adaptation does still rationalise and problematize the killing of crew-members, namely by emphasising the guilt of those who committed the act. However, because the young readers' edition reduces the opportunity for critical reflection, the horrible acts committed by the

crew-members are made easier to forget, which affects the representation of the characters. It is not only the possibility for critical reflection that can make it acceptable for heroes to kill, as proposed by Castleman and Reilly-Sanders, but also the impossibility for critical reflection. For the men of the *Essex* come across as more heroic, or at the least less faulty, in the adaptation than in the original edition.

I have also argued that both the original novel and the adaptation are not free of fictional elements. Philbrick presents the events as a tragedy and makes use of metaphors and irony which help create a tragic sub-text. The young readers' edition preserves most of the tragic irony and metaphors. The adaptation has thus kept the tragic sub-text of the original novel. The representation of the events has not changed significantly, except for the representation of the killing and eating of crew-members. The young readers' edition of *In the Heart of the Sea* remains a tragedy, but also follows the example of Owen Chase's report about the events in becoming more like a tale of trial and triumph. Even the cover picture has been transformed from a dark and gloomy void to a colourful illustration, and the story ends on a more positive note instead of alluding to the crew's impending deaths.

Even More Hidden Figures

Chapter Two

2.0 Introduction

"The untold story of the African American women who helped win the space race": this appraisal appears on the cover of Margot Lee Shetterly's *Hidden Figures* (2016). The young readers' edition of this novel, however, advertises itself a little differently on the cover: "The untold TRUE STORY of four African-American women who helped launch our nation into SPACE" (capitals in the original). In Chapter One I already discussed Olin-Scheller's and Tengberg's emphasis on the truth value of a story for a youthful audience. But there is more to this subtitle than the addition of "true".

The changed subtitle does not say that it is the story of *the* African American women who helped to launch the nation into space, but that it is the story of *four* African American women. This is because the young readers' edition focuses even more on those four women (Dorothy Vaughan, Mary Jackson, Katherine Johnson and Christine Darden) than the original edition does by leaving out many of the names of the other women who were part of these achievements. Not only are there fewer other (black and white) women mentioned in the young readers' edition, many of the men who played a part have been left out as well. I will discuss the consequences of their disappearance further on.

Shetterly's *Hidden Figures* tells the story of the four women mentioned above and how their work as computers and mathematicians contributed largely to the American victory of sending a man up into space. Shetterly elaborates on their struggles with segregation, racism and sexism, and tells how the women dealt with them and overcame these obstacles whilst working at the National Advisory Committee for Aeronautics (NACA), which later became the National Aeronautics and Space Administration (NASA).

In the following sections I will discuss several changes Shetterly made to the adaptation, starting with the use of enhanced suspense. I will also be examining the techniques used to create

the adaptation, which differ from those used in Philbrick's *In the Heart of the Sea* and also result in a simpler narrative. In the final section I will discuss the function of the pictures in the adaptation, which I compare with the illustrations used in *In the Heart of the Sea*. In each section I will explain how the changes have affected the representation of the events.

2.1 Project Mercury

In addition to the changes just mentioned, another difference between the two subtitles is that the young readers' edition only mentions America's launch into space, and not its winning of the space race (from the Russians). Of course the young readers' edition does pay attention to the conflict with the Russians. It just appears to skip the element of competition, being more directly concerned with the four women.

In the adaptation, closer attention is paid to *Project Mercury*, NASA's mission to have a man orbit the earth which started in 1958 and lasted until 1963, than to the Russians' *Sputnik* passing over America on October 4th, 1957. During John Glenn's third orbit, it is discovered that the heat shield protecting his spaceship has come loose, but a solution is found: keep the rocket pack attached to keep the loosened heat shield in place. In the original edition, we then read:

> At four hours and thirty-three minutes into the flight, the retrorockets fired. John Glenn adjusted the capsule to correct reentry position and prepared himself for the worst. As the spaceship decelerated and pulled out of its orbit, heading down, down, down, it passed through several minutes of communications blackout. There was nothing the Mission Control engineers could do, other than offer silent prayers, until the capsule came back into contact. Fourteen minutes after retrofire, Glenn's voice suddenly reappeared, sounding shockingly calm for a man who just minutes before was preparing himself to die in a flying funeral pyre. (224)

Some suspense can be detected in this representation of the event, especially in the phrase "heading down, down, down". The moment has been extended in the narration just a bit, so it takes the

reader longer to find out how the situation ended and he or she might become more curious as well. This technique, used to keep the readers' attention and create suspense, has been preserved in the young readers' edition, though the adaptation does differ from the original on this point:

> At four hours and thirty-three minutes into the flight, the rockets fired. John Glenn adjusted the capsule to the correct position – and waited.
>
> The spaceship slowed down and pulled out of its orbit, heading down. At that point – the most dangerous part of the reentry – the signals flickered, then went silent.
>
> There was no signal from *Friendship 7*.
>
> The engineers tried to figure out what had gone wrong, but there was nothing Mission Control could do.
>
> Silence.
>
> One minute passed.
>
> Then two.
>
> Three.
>
> Everyone feared the worst: that the heat shield had failed and the spacecraft had been burned.
>
> The team struggled to reconnect with the spacecraft.
>
> Ten minutes passed. Eleven. Twelve. Thirteen.
>
> Fourteen minutes after the signal silenced, John Glenn's voice returned. He was alive! (182-183)

The young readers' edition clearly enhances the suspense by counting down the minutes and having the passage take up more space in the narration as well as on the page than in the original. It almost visualises the lapse in communications between Glenn and Mission Control with its many blank spaces.

In this last fragment, the disconnection of Mission Control is represented as a dreadful mistake that has to be fixed as soon as possible. Only, it turns out that it cannot be fixed. The adult

edition represents the situation differently. There, it is almost as if this momentary blackout in communications was to be expected, it being understood that there is nothing the engineers can do about it but pray. This difference between the two editions arises because the adult edition mentions the blackout in one or two sentences, whilst the young readers' edition extends its account over several paragraphs and refers to the occurrence as "what had gone wrong". It has been transformed into an unexpected moment of system failure that has everyone on the ground holding their breaths and fearing the worst, making those fourteen minutes seem endless.

This aim to create extra suspense appears to be missing when the Russian achievements in space-travel are mentioned in the young readers' edition. By contrast, the enhancement of suspense in descriptions of Glenn's mission is noticeable throughout the adapted version. This strategy is not used in a comparable part of the adaptation, which concerns the Apollo 11's landing on the moon. There is no countdown to when Armstrong first places his foot on the surface of the moon, or anything else to mark the historical significance of the moment. No allusion to direct danger is made to create suspense and hold the reader's attention, as opposed to the adult edition which does create some suspense when describing this event. In my opinion, the explanation for the lack of suspense in the adaptation's description of the moon landing is that Glenn's mission is more directly related to the achievements of the four women (especially those of Katherine and Mary who worked on the project) and highlights the moment that the Americans had beaten the Russians in the Space Race. In the adult edition, Glenn's mission is also more significant to the narrative than those of Sputnik or Apollo 11. The adaptation's use of (enhanced) suspense, then, emphasises the significance of the event.

2.2 Simplicity Is Key

The fragment from the young readers' edition cited above doesn't say anything about Glenn's state of mind before and after the communications blackout. He corrects his position and waits. The signal

disappears until Glenn's voice is heard again. The adult edition, by contrast, has Glenn preparing himself for the worst and sounding "shockingly calm" once communications return.

Throughout the young readers' edition there is evidence that, just as in Philbrick's adaptation of *In the Heart of the Sea*, the focus has shifted mainly to actions and consequences. Much of the background information has either been condensed or left out. However, the narration of most actions and consequences has been condensed as well.

It is clear that a different approach has been used for the adaptation of *Hidden Figures* than for *In the Heart of the Sea*. In Philbrick's novel parts of the story or background information have been omitted, and some technical whaling and sailing jargon has either been exchanged for more common vocabulary or been explained. Yet it is possible to read both editions next to each other without losing grip on the story. Many sentences have virtually remained the same, only the difficult vocabulary has been altered. The story has just been combed through for anything that isn't an action or a consequence, so the adaptation can put focus on "straightforward reports of what people do and what it leads to – and not much detailed description of people, places, or emotions" (Nodelman 77).

Shetterly's *Hidden Figures*, however, appears to have undergone a rewrite instead of a comb-through. In the original edition, all the extra information and detailed descriptions of people, places or emotions have been interwoven with the action and consequence sequences, which would have made it difficult to apply the same adaptation technique as in *In the Heart of the Sea*. By retaining only the passages that are important and relevant to the action, the young readers' edition of *Hidden Figures* sometimes comes across as a kind of summary of the original novel and the historical events it relates. The story is also told in a more matter-of-fact tone – another characteristic of children's literature mentioned by Nodelman – than the *Essex*'s story. Therefore it leaves little room for reflection or questioning of the truth, an aspect which Philbrick does tackle in his novel by referring to the inconsistencies in the accounts of Chase and Nickerson.

My comparison between the following fragments serves to illustrate this summarizing tendency of the young readers' edition of *Hidden Figures*. The first excerpt is from the original edition:

> At the end of 1947, Blanche had left the group in Dorothy's command during a one-month illness. She returned to work, appearing none the worse for wear, but was out of work again on a leave of absence during July and August 1948. This time, too, she returned to the office, snapped back into her routine, and continued uneventfully for the next several months. But on the morning of January 26, 1949, a West Computer made an urgent call to Eldridge Derring, one of the lab's administrators. For the last few days, she told Derring, Blanche had been acting strangely. Now, Blanche was in the office "behaving irrationally", and she implored him to come to the Aircraft Loads Building to help the women deal with the situation. […]
>
> Together, they all went into one of the West Computing offices, where Blanche was standing in the middle of the room, preparing for a 10:00 a.m. meeting. She had covered the blackboard of the office with "meaningless words and symbols" and began to conduct the meeting in what she seemed to feel was a normal fashion. However, she was completely unintelligible to the people in front of her. […] (original edition 90)

This is only a part of the description of the event in question. Shetterly goes on by telling how Blanche Sponsler, the West Computing section head, is taken aside by her (male) bosses and later taken to a mental hospital. Dorothy is then made acting section head.

It takes Shetterly about two pages to narrate the event. In the young readers' edition, however, the account has been severely shortened:

> Dorothy Vaughan was an excellent leader within the West Area computing pool. In 1947, one of her bosses got sick and was out of the office for a month. The next year, the boss fell ill again. Then, in early 1949, Dorothy's boss began to act strangely at work. She suffered a mental breakdown and was forced to leave her job. (74)

Two pages in the original have been reduced to one paragraph. The paragraph reads as a summary that Shetterly might have used to outline her story. Yet it provides the young reader with enough information to know why Dorothy was made acting section head, and later official section head. However, the passage lacks the sense of tragedy underlying Blanche's breakdown in the original. She doesn't even get a name here. An intelligent (white) woman who managed to become a section head in a male dominated working environment, she loses her position due to mental illness. In the young readers' edition, the tragedy of her demise is lost entirely.

A similar thing happens to Dorothy Hoover, who in Shetterly's original serves as a role model for Dorothy Vaughan, Katherine Johnson and the others, being one of the first black women to work at Langley as a human computer and the first black woman to have co-authored a research publication at NACA. Because she is so very important to the careers of these women, it would have been difficult not to mention her in the young readers' edition at least once. However, her presence here has been reduced to three mentions where her acts and achievements can be related to those of Dorothy, Katherine, Mary and Christine.

In *The Hidden Adult* Perry Nodelman writes that "simplicity of style and focus on action is the first and most obvious marker that a text might be intended for an audience of children" (8). The adaptation of *Hidden Figures* displays both of these characteristics of children's literature. However, this seems to result in a text where there is little room for reflection and a story that has lost most of its emotional impact. By adopting a matter-of-fact tone, the achievements of these four women and those of others have lost much of their gravity. Nevertheless, the adaptation does sometimes elaborate on those moments, explaining how their achievements represent a greater victory than it might seem.

The simplicity of style also becomes apparent in the use of headers in the young readers' edition. They separate the events and summarize what the sections are about, highlighting the different subjects addressed in each chapter.

By focusing more on the four African-American women in particular – that is, by diminishing the presence of other women and men – it is easier to keep the focus on the action and consequences related to the achievements of these four. The story itself also becomes much simpler because of it. The first chapter of the original edition, for example, tells of the problematics of personnel shortage at Langley and how it was Melvin Butler's task to solve this by hiring (black) women. The reader follows him around in his preparations to have colored girls come to Langley. The young readers' edition, however, never even mentions Butler. It only informs the reader of the circumstances that brought these colored girls to Langley. Where Shetterly seems to have been afraid to leave out even the tiniest bit of information and wants to be as precise as possible – mentioning every name related to the events, sometimes combined with the person's entire educational history – in the original novel, she does not do so in the young readers' edition. She no longer seems to care for anything that isn't directly related to the work and experiences of Dorothy, Katherine, Mary and Christine, and NASA's success of sending men into space.

2.3 Technical Language

Because *Hidden Figures* is a nonfiction novel about mathematicians and engineers, it is to be expected that it will mention aspects of maths and science relevant to their career achievements. And so it does. It is also to be expected that the novel uses specialised vocabulary related to this work that might not be commonly known. In *Tropics of Discourse: Essays in Cultural Criticism*, Hayden White comments on historical writing and the use of such technical language:

> For if the historian's aim is to familiarise us with the unfamiliar, he must use figurative, rather than technical, language. Technical languages are familiarising only *to* those who have been indoctrinated in their uses and only *of* those sets of events which the practitioners of a discipline have agreed to describe in a uniform terminology. (94)

Philbrick's original edition of *In the Heart of the Sea* employs several terms related to sailing and whaling. Though he only uses those terms that are most commonly used and known among sailors,

these are still likely to be unfamiliar to the general public, as might well be the case with “aft”, “knots”, “gunnel” and “leeward”. However, not knowing what they mean doesn’t affect the reader’s understanding of the fabula. The story can still be read, and its meaning properly understood, despite one’s unfamiliarity with the technical language.

Yet the technical terms in Philbrick’s young readers’ edition have either been replaced with more generally known synonyms or have their meaning explained, the first approach having been adopted more often. Young readers are obviously expected to be more unfamiliar with technical language than adult readers, an assumption that seems reasonable. To make the inexperienced young reader familiar with the subject of sailing and whaling as it was done in the days of the *Essex*, it might be more effective to use “ordinary educated speech” (White 94), instead of technological language, or, in certain cases in Philbrick’s novel, to use no language at all.

Shetterly’s *Hidden Figures*, however, doesn’t take the (adult) reader’s knowledge for granted. To relate what Dorothy, Katherine and Mary are working on, it is necessary to use technical language. But Shetterly does explain her terminology. She frequently makes reference to high-level mathematics, subjects and theories the general public has never even heard off, never failing to provide clarification:

> An engineer named Richard Whitcomb noticed that in the transonic speed range, the greatest turbulence occurred at the point where the wings of a model plane connected to its fuselage. Indenting the plane’s body inward along that joint reduced the drag dramatically and resulted in an increase of as much as 25 percent in the plane’s speed for the same level of power. The Area Rule (so-called because the formula predicted the correct ratio of the area of a cross-section of a plane’s wing to the area of the cross-section of its body) had the potential to have a greater impact on everyday aviation than supersonic aircraft, because of the thousands of aircraft whose operating speed topped out at the transonic range. (110-111)

Here, Shetterly provides an explanation of the Area Rule. She does this constantly when specific terminology is used which might be unfamiliar to the reader.

The young readers' edition of *Hidden Figures* also provides extra clarification about subjects and language that the young reader might not understand. In Section 1.1, I have cited a fragment of the novel concerning the first orbital flight of John Glenn and shown how, in the young readers' edition, extra tension is built up. In this description of the first ever orbital flight it is mentioned how warning signs indicate that the heat shield might be loose. Shortly before the passage cited above, the young readers' edition explains what a heat shield is:

> At the end of the second orbit, a warning light indicated that the heat shield was loose. A heat shield is the outer covering on a spacecraft that protects it from extreme heat when the craft reenters Earth's atmosphere. Without that firewall, there was nothing standing between Glenn and the 3,000-degree temperatures – almost as hot as the surface of the sun – that would build up around the capsule as it passed back into Earth's atmosphere. (181-182)

It is assumed here that young readers, unlike adults, will not know what a heat shield is. Consequently, one sentence, "A heat shield is…", has been added to provide explanation. We see again the comparative simplicity of the young readers' edition, because the following sentence explains the exact purpose of a heat shield, albeit in a different, perhaps less direct, manner. (A similar sentence can also be found in the original edition.)

Between the original and the adapted passages about the communications blackout I used earlier, there is another difference. Instead of "retrorockets", the young readers' edition uses the term "rockets". A child may not know specifically what a retrorocket is, but it does know the meaning of the word 'rocket'. This change, however, does make it seem as if the spacecraft only consists of one type of rockets.

Exchanging a specific term for another or explaining it aren't the only techniques used to avoid the use of unfamiliar technical language in the adaptation. As with *In the Heart of the Sea,*

many technical parts of the story have been omitted. This happens, for example, in the fragment about the Area Rule cited above. In the young readers' edition, oddly, there is no mention of the Area Rule except as the title of Chapter Eleven – which is also the name of Chapter Eleven in the original edition, in which the above fragment can be found. Other chapters have been renamed because their content no longer matched the old title, or because the new title might have been considered to be more understandable. Thus the last chapter, "To Boldly Go", has been renamed "One Small Step", probably because the latter refers to the words Neil Armstrong famously spoke when he took his first step on the moon while the former refers to a quote from Star Trek, a television show the young readers might not be familiar with. The Apollo 11 mission is also a topic of this chapter, whereas the anecdote about Martin Luther King's fondness of Star Trek has been omitted from the adaptation.

By removing any mention or explanation of the Area Rule, the title of Chapter Eleven acquires a different, more restricted meaning, since the chapter also deals with Mary Jackson's anger when she has to search all the East side of Langley to find a "colored bathroom". She becomes so enraged about the racial segregation and the fact that her white colleagues laugh at her for asking them directions to *her* bathroom that she ends up venting her anger on a white engineer (Kazimierz Czarnecki), who then offers her to come work at his department. In the original edition, which also mentions the "colored bathroom" issue, the title has a double meaning, referring to the formula discovered by Whitcomb as well as to the rules of racial segregation. This shows that even changing the use of technical language to accommodate a reader can and will result in a change of meaning. Again, this also shows that the young readers' edition of *Hidden Figures* focuses more on the story of the four black women breaking racial boundaries than on the technical progress of air- and space travel.

2.4 Does a Picture Say More Than a Thousand Words?

In *The Bloomsbury Introduction to Children's Literature* Karen Coats writes: "Nonfiction relies on objectivity, language that can be taken to mean what it says, images that present photographic evidence of people and events […]" (277). Such photographic evidence can also be found in *Hidden Figures*. It consists mostly of pictures of the people who play a role in the story, portrait photos of Dorothy, Mary and even president Kennedy, and photos of the women (and men) working at Langley. It also features photographs of certain events (a soap box derby, Dr Martin Luther King Jr giving his famous speech) and locations (the West Side of Langley, wind tunnels, a launch pad). The young readers' edition contains about twenty-seven pictures illustrating the narrative. The adult edition contains none.

About the use of (illustrated) pictures in children's literature, Perry Nodelman states: "The pictures that often accompany the text also act as more complex shadows to them, providing the visual and emotional information about which the texts themselves remain silent" (77). A picture or illustration may provide information about an aspect of the narrative or event that the text does not give, a sub-text, or what Nodelman would call a shadow-text.

> In the young readers' edition, the West Side of Langley is described in the following way:
>
> She [Dorothy] looked around at the strange landscape of two-story brick offices and construction sites with half-finished buildings. Towering behind one of the buildings was a gigantic three-story-high ribbed-metal pipe. It was part of a wind tunnel called the Sixteen-Foot High-Speed Tunnel, which was used for experiments on airplanes. To make the scene even more unusual, all of the buildings had been painted dark green to camouflage them against possible attacks from America's wartime enemies. (39)

The picture which accompanies this description of the grounds at Langley, according to its caption, shows the "West Side of Langley campus in 1941, with the East Side in the background. At the left is the Sixteen-Foot High-Speed Tunnel. This is before they camouflaged the buildings" (39). The picture, then, shows almost exactly what has been described in the text. It doesn't really seem to act as a

more complex shadow text that provides extra information in the sense intended by Nodelman. Much like the text, the picture just shows the West Side the way it is. This does not mean that the picture serves no function. The presence of a picture can enhance the credibility of the story by serving as photographic evidence.

However, this isn't the case with every picture in the novel. The outward appearance of male and female characters in the story is nowhere described, except for the colour of their skin. Their photos do provide the details of their appearance, depicting the faces of the humans behind the events and thereby promoting them from characters in a novel to real, existing people. Even so, the pictures usually are not taken at the same moment in time as the accompanying event, so they add little (extra) meaning to the text.

According to Nodelman, those aspects of a picture which the text doesn't mention are the most meaningful: "A visual detail provided by the pictures makes the text's apparent simplicity itself a source of great complexity, fraught with a political and cultural import it would not have had if it had simply named what its pictures showed" (11). A few of the pictures in *Hidden Figures* do carry such political import. When the text mentions the segregation rules on the bus there is a picture of a sign that says: "Virginia State Law requires all colored passengers to ride in rear of bus" (33). When it discusses the threat of Russian spies and the Rosenberg trial, there is a picture of Ethel and Julius Rosenberg, who were condemned to death for spying for the Soviet Union, in the courtroom. There is also a picture of a fallout shelter sign from the Cold War. What these three pictures have in common is that they convey the fear that these situations caused among the people who experienced and lived with them: the fear that came with racial segregation, the popular belief in enemies and traitors, or the felt threat of a nuclear war. Just as the pictures of president J.F. Kennedy or of Dr Martin Luther King Jr. or a picture of black and white women working together, these three pictures, too, are "fraught with a political and cultural import". They support the representations of political and cultural situations in the text and also contribute to the reality effect. The photographic evidence enhances the credibility of the narrative. Children reading Shetterly's novel, after all, are

not likely to be familiar with historical events that took place at the time, whilst adults reading the novel might even have experienced some of these events themselves.

The young readers' edition of Philbrick's *In the Heart of the Sea* contains a few more illustrations than the adult edition. Halfway both editions there is a section which contains several pictures that prove the existence of the *Essex*, and illustrations that depict how it all could have looked. Some pictures of registers and lists have been left out of the young readers' edition, but most of the pictures have been retained. Some illustrations have also been added to the adaptation that do not appear in the original, and that can be found throughout the novel. These are illustrations of tools that would have been used, or of the small whaleboats that the men had to spend three months in. The function of these pictures is to provide the young reader with some additional knowledge on the subject of whaling and sailing. They provide clarification on elements that are not explained in the text. They help the young reader to get a better image of the crew's situation by contributing towards a more detailed representation of the events. The pictures and illustrations in Philbrick's and Shetterly's adaptations both supply the reader with additional information and help to enhance the credibility of the narrative.

2.5 Conclusion

When I say that the young readers' edition of Shetterly's *Hidden Figures* focuses more on the four women and America's achievements in space travel than its original, I mean that it leaves out or severely shortens the passages that do not directly relate to the American women or achievements. The adaptation emphasises the most significant events in their careers. One way in which it creates this effect is by increasing the suspense in the passages relating these events.

Like the young readers' edition of *In the Heart of the Sea*, the adaptation of *Hidden Figures* centres around action and consequences, which is a characteristic of children's literature. Another characteristic of children's literature that can be found in the adaptation is the simplification of the narrative. The original novel has not been filtered through for omittable passages and difficult

phrases but has been completely rewritten. The story is told in a matter-of-fact tone and leaves little room for reflection or questioning the truth. By almost summarizing and simplifying the original novel, the young readers' edition reduces the gravity of the events.

Not only has the narrative been simplified, the language has been simplified as well. When the original novel makes use of possibly unfamiliar or technical language, the adaptation either explains the terminology or exchanges it for more familiar, figurative language. Sometimes the technical passages in the narrative have been omitted entirely when they are not directly important for an understanding of the narrative. In some cases, this has resulted in a slight change in sub-text.

Unlike the original edition of *Hidden Figures*, the young readers' edition contains several pictures. These are photographs of people, events, locations and objects. Their main function is to enhance the credibility of the story, for they do not add a lot of new information that cannot be found in the text and therefore do not appear to have a strong influence on the sub-text, or shadow-text. Some pictures do carry a political or cultural import and emphasise the fear of wars and racial segregation. The same goes for the illustrations in the adaptation of *In the Heart of the Sea*. They help to create a more detailed representation of the events.

All in all, it seems that almost every change that has been made to the original edition of *Hidden Figures* to create the adaptation results in a simpler version of the narrative. Because of this simplification, the adaptation makes it seem as if the paths these four women took were less difficult than they actually were or have been represented to be in the original novel. In the following chapter I will further discuss how this difference has affected the representation of the heroism of these women and why the simplification has had the opposite effect on the representation of the heroism of the men in Philbrick's novel.

The Implied Child Reader

Chapter Three

3.0 Introduction

In the previous two chapters I have shown several changes between the original and young readers' editions of *In the Heart of the Sea* and *Hidden Figures*. All these alterations have presumably been made with the intention to make the narratives more suitable for younger readers. In the case of Philbrick's novel, this concerns readers aged ten and older. In the case of Shetterly's novel, this concerns readers aged eight to twelve. I believe that this two-year age difference (as well as the age limit of *Hidden Figures*) of the intended reader between the novels accounts for the use of different adaptation techniques, which resulted in a simplified version of *Hidden Figures* and just a less informational adaptation of *In the Heart of the Sea*. Age, however, is not the only difference between the intended, or implied, readers.

In this chapter I will be examining the role of the implied reader in the creation of the adaptations of both novels and how the age as well as the gender of the reader have been the most influential factors in this process. Resorting to theories by Wolfgang Iser and Perry Nodelman I will discuss the implied child reader of the young readers' editions and the effects of gaps in a text on the creation of meaning. I will proceed with a section on the implied gender of the reader and the toning down of the heroism of the female characters in the adaptation of *Hidden Figures* due to the simplification of the narrative. My aim in this examination of the implied reader is to provide more insight into the effects of the changes on the representation of the characters and events in the young readers' editions.

3.1 Text and Reader

What is meant by the term 'implied reader'? According to Wolfgang Iser's theory, this concept "incorporates both the prestructuring of the potential meaning by the text, and the reader's actualization of this potential through the reading process" (*The Implied Reader* xii). What he means

is that this implied reader is a textual agent that is capable of finding and understanding the potential meaning of the text. It is not a 'real' reader, but a constructed reader created by the author and the text. It is the reader that the author had in mind when writing the text, or, as Karen Coats phrases it: "the reader the author seems to believe would have the skills and disposition to understand and appreciate the text" (407).

One of the skills such a reader must possess is the capability of filling in the "gaps". In Iser's theory, the gaps of a text are an essential element of the communication between text and reader:

> What is concealed spurs the reader into action, but this action is also controlled by what is revealed; the explicit in its turn is transformed when the implicit has been brought to light. Whenever the reader bridges the gaps, communication begins. The gaps function as a kind of pivot on which the whole text-reader relationship revolves. Hence, the structured blanks of the text stimulate the process of ideation to be performed by the reader on terms set by the text" (*Norton Anthology* 1455).

It is the way in which the reader fills in the gaps in the text that constitutes meaning. The text doesn't only contain gaps, but also regulates the way they can be filled in. The interaction between text and reader results in an active reading process and creates a sub-text, or what Perry Nodelman would call a shadow text. The implied reader should be capable of filling in the gaps by referring to his or her own already existing knowledge.

About the relative simplicity of children's' literature Nodelman writes: "The reason for the simplicity is the author's assumption about the limited abilities of the implied audience" (8). Therefore, it might be assumed that children will not be aware of a shadow text, because of their "limited abilities". However, Nodelman believes that children must be able to see more than just the written text. Even children must have a repertoire of knowledge, which will enable them to fill in gaps:

> It is quite possible that a reader younger or less experienced than I might not be so consciously aware of how the text says less than needs to be known or as prone as I am to

> enjoy that awareness […] But the simplicity of such a story does require that a reader have more knowledge than it actually contains within itself in order to make something like the implied sense out of it. I have to suspect that this is a facet of all writing for children. The simpler it is, then, the more obviously will it say less than it hints at, demand an implied reader who knows more – and therefore, the more likely it will be that child readers who can make sense of it will understand more than is actually said. (9)

A text says less than it implies but does invite and imply a reader who can read into the shadow text. The simpler a story is, the fewer details it contains. In order to add these details, or to build on the details that are already there in the text, a certain knowledge is needed. For example, a child from Nantucket, probably having been educated on the history of whale hunting in Nantucket, might be better suited to extract a shadow text from the adaptation of *In the Heart of the Sea* than a child from Virginia. The Nantucket child might not realize how the text reveals more to him (or her), because the knowledge that made the revelation possible is common knowledge for a child growing up there. The child from Virginia, on the other hand, might be more familiar with the historical events that took place at the NASA Langley Research Center, because these events represent an important episode in the history of Virginia. It is possible, therefore, that the child from Virginia might construct a different shadow text for *Hidden Figures* than the child from Nantucket, if the latter is able to construct a shadow text at all, and vice versa for *In the Heart of the Sea*.

With the appropriate knowledge, then, a simple text can become more complex. A child who grew up in Virginia will probably understand the gravity of racial segregation and racism more than a child from Nantucket, Nantucket having been more lenient when it comes to the acceptance of nonwhites in comparison to other parts of the United States in the 19th and 20th centuries. Nantucket shipowners paid their men according to their rank, not their colour. This had to do with Quakerism in Nantucket – Quakers being opposed to slavery – combined with what Philbrick calls the "harsh reality of shipboard life" (original 26). In both the original edition and the adaptation, Philbrick states: "In a tight spot, a captain didn't care if a seaman was white or black; he just wanted to know he could

count on the man to complete his appointed task" (original 26, young readers' edition 10). This, however, does not mean that nonwhite sailors were regarded as equal and that there was no racism whatsoever.

In the original edition of *In the Heart of the Sea*, Philbrick mentions how the first sailors of the *Essex* crew to die are black (the sickly Matthew Joy being an exception). He tries to give an explanation for this, discussing the possibility that their early deaths are a consequence of racism. Perhaps the black crew-members had been given fewer provisions in comparison to the white crew-members, causing them to starve earlier. In the young readers' edition, it is also mentioned that the first to die are black; however, no possible explanation is given. Not even the biological explanation is mentioned, which is that African Americans "tend to have less body fat than their Caucasian counterparts. […] The blacks' initially lower amount of body fat meant that they had begun living off muscle tissue before the whites" (166).

In Chapter Two of the original, Philbrick describes how the crew would have been divided on board the ship:

> According to Addison Pratt, a green hand on a Nantucket ship in 1820, the forecastle was "filled with darkies" while the white sailors who weren't officers lived in steerage. Reflecting the prejudices typical of a Nantucket whale-man, Thomas Nickerson considered himself "fortunate indeed to escape being so closely penned up with so large a number of blacks" in the *Essex*'s forecastle. (34)

This passage has been omitted entirely from the young readers' edition. Not only does the adaptation omit the politically incorrect racial slur "darkies", but it leaves out the entire passage on racial segregation on board, as well as Nickerson's prejudice against the black crew-members, which might have diminished the goodness of his character and his heroism in the eyes of modern readers. The adaptation avoids any explicit reference to the possibly unfair treatment of black men. Admittedly, by explicitly mentioning that the first crew-members to die were black, the possibility of

them being treated unfairly due to their race is hinted at. But this shadow text will only be discovered by readers who possess the historical knowledge that will recognize this as a possibility.

Making a text simpler, then, also results in the creation of new gaps. A reader will still be able to understand the plot, but without the right repertoire of knowledge s/he will not be able to discover the "shadow text" behind it. Any deeper connotations will be missed.

3.2 Knowledge and Interests

In the Heart of the Sea and *Hidden Figures* both invite a different implied reader. In the introduction of this chapter I already mentioned the difference in age between these readers (ten years or older and eight to twelve years respectively). Then, in the first section, I explained how a child from Nantucket might be better equipped to construct a shadow text for the adaptation of Philbrick's novel, whilst a child from Virginia might be in a better position to construct a shadow text for the Shetterly adaptation. Both novels require an implied reader with different interests and knowledge.

In order to appreciate *In the Heart of the Sea* the reader must have an interest in topics such as (19th century) sailing, whale hunting, survival stories and/or Nantucket history. Although the young reader is aided by the author in its understanding of the plot, to understand the shadow text behind the adaptation by filling in the additional gaps the reader must also have a certain knowledge of the topics related as well as knowledge of their political and/or cultural background. To appreciate *Hidden Figures*, on the other hand, the reader must have an interest in topics such as mathematics/physics, air- and space travel, the civil rights movement, and/or the emancipation of women. Again, the reader must already possess sufficient knowledge of these topics as well as knowledge of the political and/or cultural background in order to discover the shadow text behind the story. That is to say, this is the reader which the novel aims at; the reader that will be able to interpret the novel to its maximum potential.

As said, it cannot be assumed that children will meet these requirements. The adaptations, therefore, have shifted their topics and also reduced the number of topics to make up for this

possible lack of knowledge. In the previous chapter, I mentioned how the adaptation of *Hidden Figures* puts more focus on Dorothy, Katherine, Mary and Christine and avoids mentioning the names of the other people involved in the events described. The adaption thus moves away from the general towards the singular when it comes to representing the experiences and actions of the characters. This move diminishes the amount of knowledge needed, because now the reader will not require any knowledge on the social relations between the four women and the other NASA employees or the mutual difference in professional and social standing, let alone what actions these others undertook. When the reader does need to understand the relation between the characters, it is explained in the text. But most often the names have just been replaced with titles: "her [Mary's] boss's boss's boss, a division chief, one of the laboratory's top-ranking managers and most respected researchers" (91). This is one of the most obvious changes that have resulted in a simplified version of Shetterly's original.

These shifts in topics can also be found in the adaptation of *In the Heart of the Sea*, even more so in comparison to the adaptation of *Hidden Figures*, which still tries to cover a great many topics in order to be as thorough as possible. The young readers' edition of Philbrick's novel moves away from topics such as the technicalities of sailing (for example, by omitting any reference to the setting of the sails), Nantucket history and life, and the division of the crew. What is left is a focus on whale hunting and survival at sea, the main topics of the original novel. This will leave us with a text that is in every way simplified except for its shadow text. This does not mean, however, that the adaptation and the original novel still share the same shadow text. Both the texts and their readers differ too much for that to be possible.

3.3 Boys and Girls

I have argued that there are several factors that influence the creation of an adaptation: the age, interests, knowledge and background of the implied reader. That the adaptation of *Hidden Figures*

appears to be much more simplified than the adaptation of *In the Heart of the Sea* can be explained by the different ages of the implied reader.

Another factor which is likely to influence the creation of the adaptation is the gender of the reader. As I mentioned in the introduction to this chapter, *Hidden Figures* (both the adaptation and the original) seems to be aiming at a female audience. The narrative centers on four female characters and tells of their confrontations with sexism and racism whilst working in a field ordinarily dominated by (white) men. The novel also celebrates their emancipation and their achievements in the fields of mathematics and engineering. It is a story which a woman can identify with better than a man, and even more so if the woman in question is African American. Meanwhile both the adaptation and the original of *In the Heart of the Sea* seem to be targeting a male audience. The novel only contains male protagonists and is set in the masculine world of whale hunting.

One of the changes which I haven't fully discussed yet is the change in the representation of the male and female characters in the adaptations. As I pointed out in Chapter One, the men of the *Essex* are represented as more heroic. Their cannibalism has been made forgettable by not allowing the reader much (or any) critical reflection on the subject, and by emphasizing their emotional struggle when they have to eat a crew-member. By diminishing their horrors, their heroism is boosted.

The opposite seems to happen with the representation of the women in the young readers' edition of *Hidden Figures*. Like the adaptation of Philbrick's novel, it also reduces the possibility for critical reflection, by the reader as well as by the characters, and therefore loses much of its emotional impact, as I have shown in Chapter Two. The difficult decisions the women had to make and the obstacles they faced and overcame, have lost most of their weight. When Mary is laughed at by white female coworkers for asking directions to *her* bathroom, she becomes enraged and feels humiliated. Because the adaptation has shortened the passage which narrates this event, it lessens its impact. That Mary almost needs a map to find the "colored" bathroom is an insult. As I mentioned, she ends up venting her anger on Kazimierz Czarnecki after which he surprisingly offers

her to come work for him at his department. A black woman talking openly like that to a white man was unheard off, yet it resulted in a job offer. But the weight of these events becomes minimized due to the simplicity of the adaptation. It is because of the lack of opportunity for emotional impact and reflection that the heroism of the four women is diminished instead of boosted. But why does this same lack have a negative effect on the representation of the women and a positive effect on the representation of the men?

Negative actions and experiences have been minimized in both adaptations, however in *Hidden Figures* there are positive results *despite* these negative actions and experiences, whilst in *In the Heart of the Sea* there are positive results *because* of the negative actions and experiences. Because the women in *Hidden Figures* have achieved success despite their setbacks and encounters with discrimination, their achievements become less great when their struggles are minimized. The survivors of the *Essex* were only able to survive by resorting to cannibalism and drawing lots to decide who would be eaten. The result of their horrors is that they survive, however their survival is not very triumphant because of the horrors. By minimizing the unsavoriness of these necessary horrors, their struggle for survival appears greater and therefore their survival becomes a much more heroic triumph.

But why would Shetterly's adaptation diminish the triumph of its characters, whilst Philbrick's adaptation enhances it? The explanation can be found within the ideological values in the works as well as their implied readers. On ideology, Elizabeth Parsons writes the following in *Keywords for Children's Literature*: "Children's literature tends to be a largely ideologically conservative genre in that it often upholds the values of the culture in which is it [sic] produced and consumed as part of an inherently didactic agenda" (114). Western culture upholds different values today than it did in the fifties and sixties of the last century. It is no more than understandable that a novel set in that period of time but written in the 21st century mirrors some of the values of this century. The story of *Hidden Figures* starts at a time where there was no equality among white and non-white people, or among men and women. The story ends at a time where the fight for equality

was finally becoming successful. The novel was written in the 21st century where everyone is equal by law and has equal rights, though social equality has not yet been achieved. By representing the lives and achievements of Dorothy, Mary, Katherine and Christine, Shetterly contributes to the ongoing battle for equality. With her novel she makes the statement that these women have not been given the appraisal they deserve. Their contributions and achievements have been kept in the dark for too long and need to be shown. After all, equality starts with the acknowledgement of the other.

> The adaptation of *Hidden Figures* clearly states its purpose in the prologue:
>
> It wasn't until I was older that I appreciated just how extraordinary this occupation was for black women in the South during the days of segregation. […]
>
> The contributions made by these African-American women have never been heralded, but they deserve to be remembered – and not as a side note in someone else's account, but as the center of their own story. These women should be celebrated not just because they are black or because they are women, but because they are an important part of American history. (2-3)

The story of the NASA women is part of American history and therefore it is worth telling according to Shetterly. It is not the history of segregation or the history of emancipation or the personal history of these women, but the history of America. If America had lost the space race, the story of the women would probably not be worth telling. The adaptation discusses most of the issues of segregation and emancipation that are represented in the original novel, but not as elaborately or with as much weight as in the original, as I have shown with Mary's bathroom ordeal. This difference causes the young readers' edition to be more conservative than the original edition. The story has value because it is part of American history, because these women contributed largely to America's space race victory. That is what Shetterly above all wants her reader to celebrate, not that these women fought the boundaries created by discrimination.

This conservative shift is explained by the didactic agenda of the adaptation. More than the original edition, it is the aim of the young readers' edition to educate its reader. As I mentioned in my introduction, adaptations like this are often created to be part of a school curriculum. The adaptation of *Hidden Figures* is to educate the young reader on the space race and the people behind the victory, revealing that not only men but also women and African Americans were part of that victory. By focusing on the story of the four (African-American) women, the novel becomes more appealing to young girls, who might be inspired by the story. Not only does the adaptation educate the reader on a part of American history, but it also aims to inspire girls to pursue a career in science and/or mathematics. Therefore, it is more effective to minimize these struggles with discrimination, resulting again in a more conservative representation. Besides, today's boundaries are not the same as the ones faced by Dorothy, Mary, Katherine and Christine. Women still encounter discrimination in those male dominated fields such as science and mathematics, but less and in a different way than they did. In this day and age, it is easier for a woman to become a mathematician, a scientist, or an engineer, so why not mirror that in the adaptation so as not to frighten girls?

The adaptation of *In the Heart of the Sea* has also been slightly adjusted to the standards and values of today. Philbrick mentions, in the original as well as the adaptation, that in the early 19th century survival cannibalism was acceptable. It was even unusual for people in a shipwreck to refrain from it (164). In the 21th century, however, survival cannibalism is found to be much more horrifying and unacceptable, which might be a reason to minimize the representation of it, especially in nonfiction children's literature.

In order to represent more accessible role models for young female readers the adaptation of *Hidden Figures* reduces the 20th century hardships of sexism and racism encountered by the women in the original novel and reflects the present-day values of society. Women are subject to different gender-ideologies than men. Unlike a man, a woman is still not considered to be able to do everything and be everything she sets her mind to. Women still face opposition and disbelief when they venture into a male dominated profession. Yet, the younger generation of women is

encouraged to take on these “male” professions, because we strive towards equality in the workplace. It is therefore more effective to reduce the representation of the difficulty the women had who went before them and to generalize their contributions and achievements instead of making them an exception.

3.4 Conclusion

The implied reader is a textual construct. It is the reader created by the author and the text that is best suited to understand and appreciate the text. By filling in the gaps in the text a reader should be able to construct a shadow text on the basis of a minimum repertoire of knowledge. The more gaps a reader is able to fill in, the more complex the shadow text becomes.

Philbrick’s and Shetterly’s novels both require a different reader. The understanding and appreciation of both texts depend on the reader’s background, knowledge, interests, age and gender. The age of the implied reader has been the most influential factor in the creation of the young readers editions. Children do not have the same knowledge as an adult. It cannot be assumed that every child will meet the requirements of the implied reader and will be capable of reading the novel to its maximum potential. However, the adaptations seem to have solved this problem, for they have reduced the number of topics with which the reader has to be familiar with to understand the narrative. They also only focus on the most relevant people and events. In order to meet the needs of young readers, it is necessary to limit the knowledge that is required for understanding the text. To do so, the text must be confined in its content and one of the most effective ways to do this is by centering on actions and consequences.

One of the determining characteristics of the implied reader is gender. *In the Heart of the Sea* would appeal more to and be more relatable for a male reader, whilst *Hidden Figures* would appeal more to and be more relatable for a female reader. This goes for both the original, adult novels and for the young readers editions. To create more approachable role models for young readers of today, the adaptations have altered the representations of the characters and their worlds to fit better with

present standards and ideological values. In doing so, they have minimized the weight of the racism and sexism faced by the women of *Hidden Figures*, and they have minimized the horrors committed and faced by the male characters of *In the Heart of the Sea*. They have simply simplified the circumstances of the events and characters. Because of this simplification, however, the men have their heroism increased, while the women have their heroism diminished. At the same time this change can stimulate young girls to pursue careers in male dominated professions, namely by generalizing the achievements of the women in *Hidden Figures* instead of making them more of an exception.

Conclusion

The adaptations of the nonfiction novels by Philbrick and Shetterly were motivated primarily by the change in the age of their implied readers. The targeted gender of these implied readers remained the same, as did most of the interests required of them. Because the reader had become younger, it was to be expected that s/he would not have the same kind of knowledge as an adult. Accordingly, both *In the Heart of the Sea* and *Hidden Figures* have been altered in different ways.

Both young readers' editions focus on the actions and consequences related to the main events of the narrative. The adaptation of *In the Heart of the Sea* omitted most of the passages relating experiences or extra information. However, the focus on actions and consequences is not accompanied by a change of style. In the Shetterly adaptation, by contrast, we do not only find a focus on actions and consequences, but also a simplified style. The original novel has been entirely rewritten instead of divested of its dispensable elements. However, it still tries to address as many topics as possible, though it shifts its focus towards the main events and main characters and keeps its references to other events and characters as brief as possible. An increase in suspense can be found in the passages relating the most important achievements of the women and NASA, which is another way the adaptation shifts the focus to the main events.

The simplicity of style as well as the matter-of-fact tone make for a text that contains little possibility for reflection. Consequently, the young readers' edition of *Hidden Figures* reduces the weight of the events. It makes it seem as if the women did not have to work as hard for their achievements as in the original novel. This lessens their heroism.

The opposite is noticeable in the young readers' edition of *In the Heart of the Sea*. There, the heroism of the men has been enhanced because the adaptation leaves less room for reflection but at the same time rationalizes their negative actions. This shift causes these actions to be easier forgotten, which boosts the heroism of the men and results in a shift from tragedy towards a "tale of trial and triumph".

The focus on actions and consequences in the adaptions results in a shorter text containing more gaps. The text therefore might appear to be simpler, but the more gaps the reader is capable of filling in, the more complex its shadow text potentially becomes.

Another aspect of the adaptations that makes the text simpler, is the avoidance of technical language. Both novels have limited the use of unfamiliar technical language related to sailing or mathematical terminology respectively by either exchanging them for more commonly used language, what Hayden White calls figurative language, or by explaining the unfamiliar jargon. Sometimes technical language has been omitted entirely, when it is not directly relevant for the understanding of the narrative. In some occasions, this has resulted in a slight change in sub-text.

Pictures and illustrations in children's literature often provide extra information that cannot be found in the text, which then contributes to the creation of a shadow text. Neither the illustrations in the adaptation of *In the Heart of the Sea,* nor the photographs in the adaptation of *Hidden Figures* seem to contribute much to the shadow text. The illustrations in the Philbrick adaptation do contain extra information, yet they only provide clarification for technical terminology or contain extra information that is not essential to the narrative. The pictures in the adaptation of *Hidden Figures* usually show exactly what has already been described in the text, except for several photographs of characters which provide information on their appearance, and photographs of objects which carry political or cultural import. In my view, the main function of the photographs in the young readers' edition of *Hidden Figures* is to enhance the credibility of the story, rather than contributing to the creation of a complex shadow text.

Both young readers' editions emphasise that they are true stories so as to take away any confusion between fact and fiction. Philbrick informs his youthful audience that some of the sources he has used (Chase's and Nickerson's reports) were deliberately altered to suit the purpose of the writers. He thereby leaves room for the reader to critically reflect on the narrative, in the adaption as well as in the original. Shetterly, on the other hand, leaves little room for reflection in her adaptation. The matter-of-fact tone of the adaptation also doesn't invite any questioning of the narrative.

The changes made to the originals in order to create the young readers' editions have indeed altered the representation of the events. As I have argued, the adaptations have influenced the representation of the characters when it comes to their heroism. The heroism of the men in the Philbrick adaptation has been increased, whilst the heroism of the women in the Shetterly adaptation has been decreased. The adaptation of *Hidden Figures* also reduced the number of people involved in the work at NACA and NASA, as well as the importance of their involvement. Furthermore, the Civil Rights Movement protests come across as less urgent in the adaptation. They seem to be taking place far from Langley and the four women and therefore lose their great impact on the lives of the women. The same goes for the threat of the Cold War and Russian spies. The fear of these threats had a big influence on the events at Langley, yet the extent of their influence disappears in the simplification and summarization of the adaptation.

Because Philbrick's *In the Heart of the Sea* has not been completely rewritten to create the young readers' edition, as is the case with *Hidden Figures*, the representation of the events has remained essentially similar. There are a few exceptions however, noticeably the passages concerning cannibalism. By omitting most of the background and extra information the representation of most events has become less elaborate and less poignant. As I mentioned before, the changes in representation cause a shift in genre from a tragedy to a tale of trial and triumph. This shift is paired with the increase of the heroism of the men. Today's view on survival cannibalism is different from that in the 19th century, therefore, by reducing the representation of it as well as that of other horrors committed by the crew-members, the adaptation starts to reflect present-day values.

The adaptation of *Hidden Figures* also reflects present-day values of society more than the original. In doing so, the characters become more accessible as role models for young female readers. Instead of discouraging young girls from pursuing a career in a male dominated profession by showing them the difficulties these women faced and representing them as exceptions, the adaptation encourages the girls by generalizing the achievements of the women and by minimizing

their struggles. So, by diminishing the heroism of the women and by mirroring the present ideologies, the idea of becoming a mathematician, (rocket)scientist, or engineer as a woman is presented as more general and more approachable to the young female reader.

I believe that this is why the young readers' edition of *Hidden Figures* has value. The novel tries to stimulate young girls to follow into the professions of the main characters and to break boundaries. It is desirable that girls at a young age read about women like Dorothy, Katherine, Mary, and Christine, because it will help them shape their future. The adaptation of *In the Heart of the Sea* does not share this function. It does not try to stimulate young boys to become whale hunters or sailors. It does, however, have an educational purpose and because of that shared purpose both Shetterly's and Philbrick's young readers' editions are more acceptable and valuable than for example a young adult edition of Dan Brown's *Da Vinci Code*.

I have only researched two novels and their adaptations. Further research is required in order to be able to draw a conclusion about the value and effects of young reader's editions in general. I have not approached the autobiography in my research, even though there are plenty of young readers' editions of them.

Another interesting research would be to further examine the differences between nonfiction novels written for boys or girls. Are events represented differently based on the gender of the reader? These novels are created by adults and these adults decide how they want to represent the events to children. It Is not unthinkable that publishers and writers use a different approach between writing for boys and writing for girls. There are many assumptions and conventions when it comes to children's literature aimed at one gender. I do believe that the distinction between literature for girls and literature for boys has changed over the years, that the gap has become smaller. Nevertheless, there are still differences to be found and a research into these differences might provide interesting insight into people's views on gender.

Appendix

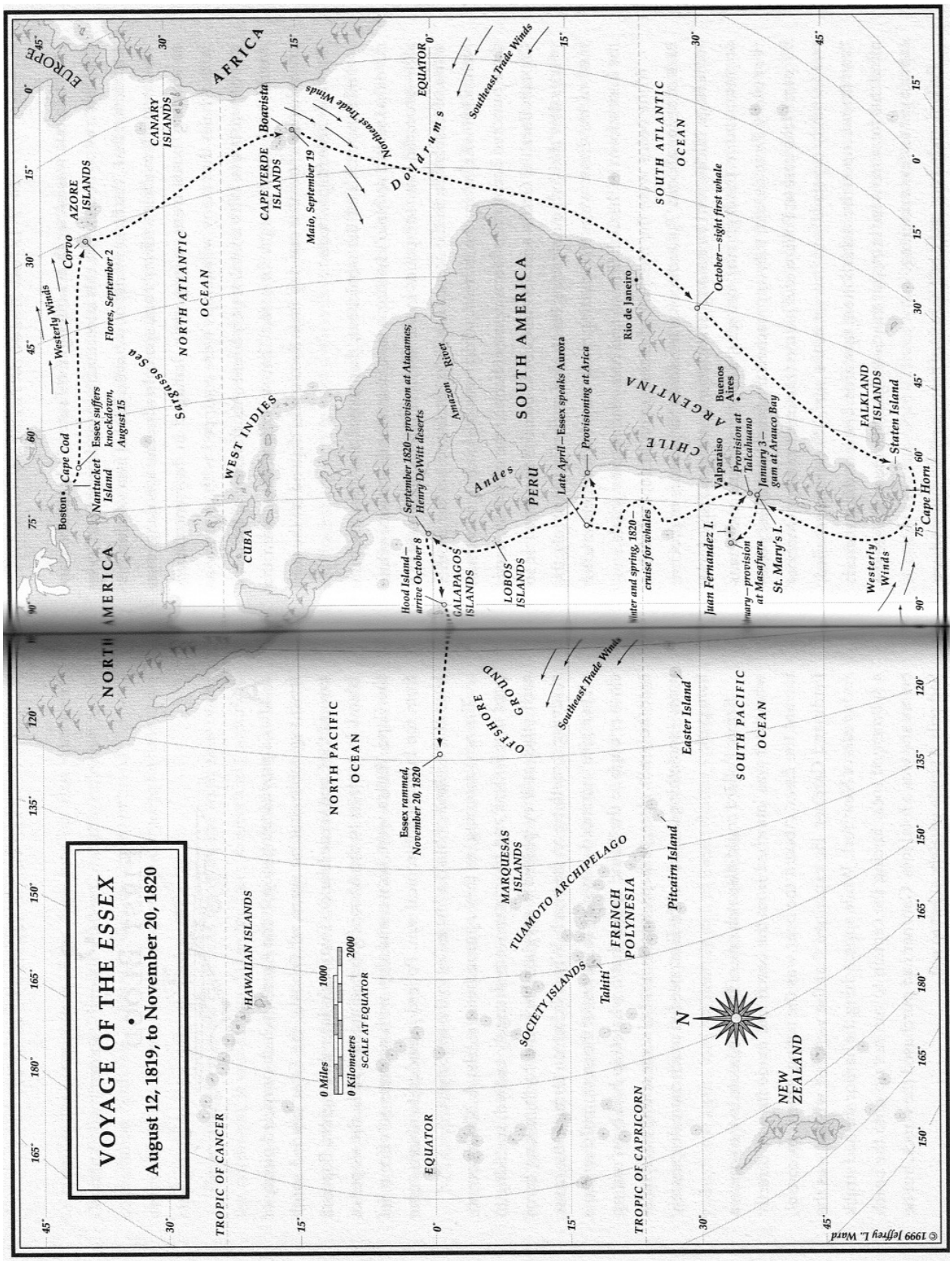


Illustration from *In the Heart of the Sea*: The Voyage of the *Essex*
(original edition 46-47, young reader's edition 26-27)

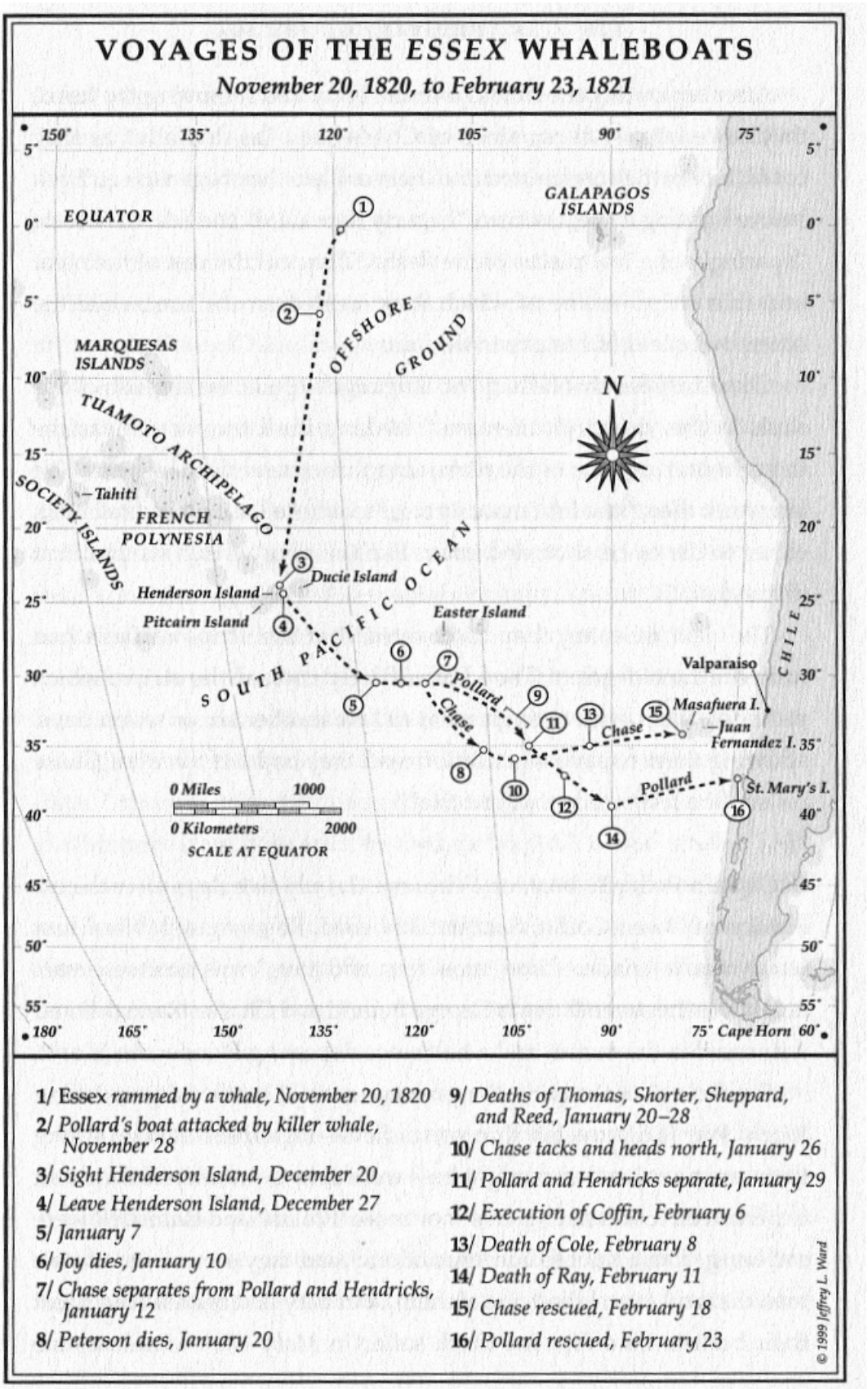


Illustration from *In the Heart of the Sea*: Voyages of the *Essex* Whaleboats
(original edition 179, young readers' edition 125)

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