Life Story/Science Story: Biography as a Tool for Science Communication

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Abstract

Storytelling, and specifically biographical material, can be used to enhance science communication in schools by increasing interest and engagement, placing discoveries in the context of scientific history, providing good role models and showing the place of teamwork in science. But what qualities make a biography suitable? The literature review of this thesis provides a synthesis of existing research into storytelling and biography as teaching tools, discussing both advantages and pitfalls. Based on the existing literature, six components of a good biography are proposed, using the acronym CHAIRS for context, humanness, accuracy, interest, representation and synergism. Three biographies by noted science communicator Sheila Natusch are evaluated by these components. Roy Traill of Stewart Island and An Island Called Home are found to meet the requirements, while William Swainson of Fern Grove does not. Sheila Natusch’s biography Knowing Sheila: The Life of Sheila Natusch, which I wrote as the creative component of this thesis, is also evaluated and is found to meet most but not all of the requirements.
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Introduction

This thesis, Life Story/Science Story, is presented as partial fulfilment of the requirements of a Master’s Degree in Science Communication at the University of Otago. It consists of two main sections, the academic component and the creative component, as well as introductory material and conclusions.

In section one of this thesis I review the related literature and examine the advantages and pitfalls of using biography as a medium of science communication, specifically in the area of science education. Using the information found in the literature review I create a checklist of desired qualities; context, humanness, accuracy, interest, representation and synergism. With this checklist I evaluate selected biographies written by Sheila Natusch, as well as my own biographical work, Knowing Sheila. I use Burns et al. (Burns, O'Connor, & Stocklmayer, 2003), definition of science communication (the vowel analogy):

Science communication (SciComm) may be defined as the use of appropriate skills, media, activities, and dialogue to produce one or more of the following personal responses to science.

Awareness, including familiarity with new aspects of science

Enjoyment or other affective responses, e.g. appreciating science as entertainment or art

Interest, as evidenced by voluntary involvement with science or its communication

Opinions, the forming, reforming, or confirming of science-related attitudes

Understanding of science, its content, processes, and social factors
Science communication may involve science practitioners, mediators, and other members of the general public, either peer-to-peer or between groups.

Biographies are often thought of as “an account of someone’s life written by someone else”\(^1\), but for the purposes of this analysis, the genre of biographical literature will also include autobiographies; “an account of a person’s life written by that person”.\(^2\)

For the purposes of this thesis, science education (the teaching of science in a classroom) is considered a subset of the wider field of science communication as defined by Burns.

Traditional forms of science communication often leave something to be desired in their transmission of knowledge from the source to the recipient. Trachtman describes the difficulties thusly:

> Because of the slow and complex nature of science’s growth, and the social context in which most scientists work, and the wide range of approaches masquerading as “the scientific method” it is difficult to communicate to the public the actual, tentative, probing, frequently intuitive nature of much of science (Trachtman, 1981, p. 14).

How then may we communicate those qualities of science? One way is through storytelling, and its subset, biography. Storytelling is a proven method of conveying information in an accessible and interesting way (Clary, Wandersee, & Carpinelli, 2008; Egan, 1988; McKinney & Michalovic, 2004; Roach & Wandersee, 1995). Biographical information has been used to improve student’s understanding of scientists and the scientific method (Traver, 1998).

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\(^1\) [http://www.oxforddictionaries.com/definition/english/biography](http://www.oxforddictionaries.com/definition/english/biography)

\(^2\) [http://www.oxforddictionaries.com/definition/english/autobiography](http://www.oxforddictionaries.com/definition/english/autobiography)
Biography gives life to science and scientists. As Turner says in *Book Links: Science as Biography*, *Biography as Science*:

Biography is intensely personal, of course. Writing about science from one person’s perspective allows me to breathe warmth and emotion into an endeavour usually known for clinical detachment (2009, p. 29).

Biography allows us a window into the lives of people we admire. Robert Paradowski, in *Some personal reflections of a Pauling biographer on the art and science of scientific biography*, states:

I am convinced that biographies satisfy deep needs in human beings. We are naturally curious about our fellow human beings, and we want to know what their lives were and are like, particularly those lives that achieved a level of greatness. I suppose we hope that the personalities and life experiences of great scientists will be just as admirable as their scientific works we have grown to esteem (1996, p. 9).

Section one of this thesis will evaluate certain tenets of an effective biography, using a checklist of attributes including interest, accuracy, non-stereotypical images, and a setting that places the scientist in the context of his/her culture and times. After a general discussion on these qualities, I will be focussing on the author and illustrator Sheila Natusch, who has written several books about scientists/naturalists with a biographical treatment. I will also evaluate the creative component of this thesis, *Knowing Sheila: The Life of Sheila Natusch*, to see if it possesses the attributes of an effective biography.

Section two presents the creative component of this thesis, my biography of Sheila Natusch called *Knowing Sheila: The Life of Sheila Natusch*. This work describes Natusch’s life, her
contributions to science communication through books and articles, and her other writings on history, travel and biography.

Research question

What qualities make biographical material a useful adjunct for science communication?

For the purposes of this thesis, a biography is considered useful if it engages the heart and mind of the reader (Awareness and Enjoyment, see Burns (Burns et al., 2003)), encourages them to learn more about the subjects involved (Interest), and challenges or informs their opinions and understanding of science (Opinions and Understanding).

Objectives

The objectives of this thesis are:

a) To provide a review of the contemporary literature about storytelling as science communication, concentrating specifically on biography as a method for engaging the hearts and minds of readers and students. To synthesize the results to provide a useful, though by no means exhaustive, checklist of features that could potentially be of use in evaluating biographies for their potential to enhance understanding of science and scientists both in a classroom and amongst the general populace.

b) To focus on a single author, Sheila Natusch, as a successful purveyor of scientific concepts through biography.

To evaluate my own biographical work, Knowing Sheila, in light of the standards I learnt through my review of the literature.
Section One—The Academic Component
A review of the related literature

Introduction

The literature review for *Life Story/Science Story* will attempt to determine the advantages and disadvantages of using biography for the purposes of science communication. Focussing on science communication within the classroom, I begin with a broad overview on the need to teach science, and whether present teaching methods are adequate. I then give a brief summary of selected literature related to how science could be taught, including the practice of telling stories. Biography, as a subset of storytelling, is reviewed next, with a general look at its efficacy in different subjects. Lastly, the literature review focuses on the use of biography specifically for teaching science, with its advantages and pitfalls.

I don’t attempt, within the scope of this literature review, to justify the advantages of using biography within the wider field of science communication, as it would have broadened the scope of the review beyond the limits of my conclusions about the use of biography as a tool for understanding science and scientists.

The need for science education

No discussion of teaching science can begin without an understanding of why science education is so important. Western societies tend to hold anything designated as science in high regard, despite repeated examples of science failures. As science becomes more and more complicated people are less able to understand and criticize knowledge presented as “science,” creating unnecessary awe. This disengagement allows harmful conspiracy theories, such as the anti-vaccination movement, to sway public opinion (de Camargo, 2011).
The Committee on Science Learning offers the following five reasons for teaching science:

1. Science is a significant part of human culture and represents one of the pinnacles of human thinking capacity.

2. It provides a laboratory of common experience for development of language, logic, and problem-solving skills in the classroom.

3. A democracy demands that its citizens make personal and community decisions about issues in which scientific information plays a fundamental role, and they hence need a knowledge of science as well as an understanding of scientific methodology.

4. For some students, it will become a lifelong vocation.

5. The nation is dependent on the technical and scientific abilities of its citizens for its economic competitiveness and national needs (Taking Science to School: Learning and Teaching Science in Grades K-8, 2007, p. 34).

Science is pervasive throughout life, and science education is necessary to create science literacy in students and increase the level of literacy in the general population (Lonsbury & Ellis, 2002). Teaching children about science helps create citizens who can employ critical thinking about advances in science and can add intelligent discussion to controversial science-related issues like genetically modified foods (MacDonald & Gustafson, 2008).

Children, especially, often have a skewed vision of scientists and what they do (Boylan, Hill, Wallace, & Wheeler, 1992). Children’s exposure to science often comes through television viewing, and the shows portray science as “mysterious and magical”, “dangerous”, and “accurate, infallible and above criticism”. Scientists are an “elite and privileged group, “eccentric and anti-social”, and even “evil and violent” (Long & Steinke, 1996, pp. 103-104). Clearly, science educators face an uphill battle in describing scientists and science accurately.
The current state of science education

Does current science education meet the needs of students wanting to learn about science and scientists? Science is often oversimplified, with an emphasis on methods rather than theory building and testing, leading to misconceptions about the nature of scientific enquiry.

Children may not be well-served by the current education environment, which tends to overemphasize method, especially experimental method, at the expense of theory and model building and does not provide the bigger picture that allows children to gain an understanding of how scientific knowledge is attained. It could even create misapprehensions about the complexity of scientific endeavour, leaving students convinced that scientific knowledge is easy to obtain and comes directly from observation (*Taking Science to School: Learning and Teaching Science in Grades K-8*, 2007).

Science education has also been said to be too passive (Clary & Wandersee, 2006), and has emphasized getting the right answer over students’ understanding. Students are often tasked with formulaic or repetitive work, and are given either very easy or impossibly hard assignments. The subjects taught bear no relation to the students’ ordinary lives (*Engaging Schools:Fostering High School Students’ Motivation to Learn*, 2003). Science is often taught as a collection of facts, ignoring the people and processes that led to their development (Roach & Wandersee, 1995). Duschl, in Wandersee and Roach (1998, p. 282), calls such science teaching “the presentation of final form science” and warns of its dangers: namely,“(1) all knowledge claims may be treated as equal; (2) knowledge claims may be decontextualized; and (3) theory change in science may be inaccurately portrayed”.

Subjects should not be simplified to the point that the learner loses information vital for knowledge construction. The story loses meaning by skipping straight to the end; to the
student, science becomes what Joseph J. Schwab (1958), has called “a rhetoric of conclusions”.

The science teaching model based on empirical strategies and mechanistic assessment limits its aims to a narrow viewpoint that seeks only to improve logical thinking. It does nothing to use or increase the imaginative and creative breadth of children’s thought (Egan, 1988).

Science textbooks, past and present, offer little in the way of historical context, preferring to convey “popular, contemporary, cleaned up and pre-justified accounts of the behaviour of the natural world”, leaving the impression that science is just a steady climb towards the peak of modern accomplishment (Monk & Osborne, 1997, p. 405). They tend to summarize contemporary ideas without reference to their development, promoting the idea that science is a collection of unchanging facts that need no justification (MacDonald & Gustafson, 2008).

How should we teach science?
An analysis of the literature on the teaching of science is a subject far too broad for the scope of this review, but there are some specifics in the literature worth mentioning in the context of this thesis, Life Story/Science Story.

The first is that it is important to teach children about the nature of science rather than just aiming for scientific literacy. According to Wandersee and Roach (1998, p. 282), the nature of science is:

A discipline-specific knowledge of the natural objects, events, and properties to be studied, the presuppositions and assumptions about them, the theories used to decide what the important unresolved questions are, the methods and instruments the
discipline employs to gather valid and reliable data, the habits of mind associated with practitioners of the discipline, the kinds of knowledge and value claims that typically are made, the ways in which such claims are adjudicated by that community of scholars, and what constitutes ‘progress’ in that scientific discipline (1998, p. 282).

This knowledge provides students with an understanding of why we know what we know, and also how we came to know it. It also shows students why science is a rational enterprise and should be trusted, because they can thoroughly understand the methods with which scientists reach conclusions (MacDonald & Gustafson, 2008).

The norms and practices of science should be made clear to students, especially when those norms are outside of students’ experiences. The scientific worldview can also be taught through the history of science, by giving instances of scientists who demonstrated it by their lives and work (Irwin, 2000; Wandersee & Roach, 1998). Time spent on the historical contexts of science, even at the expense of the conventional curriculum, is time well spent as far as students’ understanding of the nature of science (Irwin, 2000).

**Storytelling as a tool for teaching**

Storytelling is found in all cultures and stories are told and enjoyed by everyone, everywhere (Egan, 1988). Smith, in Roach and Wandersee (1995), says that one function of culture is to perpetuate the stories that people need to make sense of the world. Story and parable form the root of all human understanding (Wandersee & Roach, 1998). Not just a casual amusement, story reflects a fundamental and powerful way in which we interpret our experience of the world. It is the most natural communication medium, and one which by learning is best achieved (Egan, 1988). Storytelling can convey concepts in a high-interest way (McKinney &
Michalovic, 2004). Schatt and Ryan assert that storytelling was commonly practiced by American teachers and librarians from the 1800s-1930s, but declined when educational methods shifted “to a more industrial model of teaching”. They also believe that it is time to “reverse this trend” (Schatt & Ryan, 2015).

Storytelling, or narrative, can also immerse the reader, allowing for experience and understanding that might not otherwise be possible. Verducci, in *Narratives in Ethics of Education* describes this phenomenon:

> When we watch a good movie or read a good book, we can be transported into the world that the artist has created. We forget we are sitting in a theatre or on a couch (2014, p. 578).

Children are willingly and powerfully engaged by stories (Egan, 1988). Storytelling is prevalent in childhood and early schooling, but older students are taught through “cold abstraction”, particularly in science and math instruction (Wandersee & Roach, 1998). Nevertheless, storytelling is a valuable teaching tool and one often overlooked (Harbin & Humphrey, 2010; Roach & Wandersee, 1993). It works for all ages, not just young children. A good story can capture a student’s interest and enhance recall (Harbin & Humphrey, 2010). People remember stories they heard as children and now pay millions of dollars to see stories via satellite TV, movies and plays (Roach & Wandersee, 1995). The dramas of life create a cognitive response that can be used for solving other problems and future learning (Egan, 1988).

Teaching with stories does not have to be difficult. Roach and Wandersee (1995) have developed interactive stories called interactive historical vignettes (IHV) which use only ten
to fifteen minutes of class time. Storytelling doesn’t require a drama degree, theatrics, dressing up or even pictures to be effective in painting a picture in students’ minds (Harbin & Humphrey, 2010).

Personal stories in science create wide interest due to the often high stakes involved—think of Galileo, Darwin or Watson and Crick (Learning Science in Informal Environments: People, Places, and Pursuits, 2009). A science story told through the eyes of a scientist presents an open-ended view of science that an experiment using preselected and premeasured chemicals to obtain a single “correct” result cannot match (Turner, 2009).

Problems with storytelling

However, not all researchers accept that simple storytelling is a straightforward way to impart knowledge, at least on its own. In response to Egan, Cook-Gumperz (1993) wonders how our understanding of a story depends on the quality of its verbal expression. She believes that contextual situation of a narrative shapes its understanding, and different types of narrative create different experiences in children.

Storytelling can be immersive, which certainly creates interest and involvement, but it is important that the narrative is carefully selected so as not abuse this power. As Verducci writes:

This perceptual takeover can be a double-edged sword—dangerous when used for purposes of propagandizing or indoctrination, helpful when enquiry into empirical truth and moral understanding is the aim (2014, p. 578).
Further problems with using storytelling to communicate science (related specifically to biography) are related in a separate section below.

**Biography as a useful form of storytelling**

Biographies have proved to be a useful adjunct to teaching. They promote critical thinking and encourage students to read (Waller, 2008). History, taught only as facts or cause and effect can be boring and seem abstract to students without the human connection of biographical stories. Teaching from the perspective of people who were marginalized in the past allows students to understand the complicated relationship between the such people and the more familiar society in which they lived (Leckie, 2006). Biographies help students connect with people of the past, personalizing their understanding of history and creating strong emotional and intellectual connections. They help students see such people were the creators and agents of history, dispelling the misconception that they are its powerless victims (Fertig, 2008).

Diversifying teaching strategies by adding biographical material makes presenting multiple perspectives less difficult (Morgan, 2009). It also allows the teacher to meet the needs of a diverse set of students (Hayes & Robinson, 2012). In particular, biographies of disabled people can show students that they are more than just inspirational figures, but are rather complex individuals with changing experiences (Nielsen, 2009).

**Biography as a teaching tool for science**

Scientific biography, read and discussed in class, is an interesting and useful way to increase students’ understanding of how scientists work to move science forward (Traver, 1998). Because many historical accounts deal with the discovery and testing of new theories, it can
be useful in teaching students about the nature of scientific theories and how scientific ideas change over time (MacDonald & Gustafson, 2008). Children often prefer reading biographies to their school textbooks (Ellis, 2010). Seeing the blunders and missteps of highly respected and intelligent researchers through studying the history of scientists and scientific practice gives students comfort in their own mistakes, and shows that they can be overcome (Monk & Osborne, 1997). Chan (1997), in Wandersee and Roach (1998) found that students who were taught using interactive historical vignettes (IHV) understood the nature of science significantly better than those who were taught conventionally. They also have a better understanding of how a scientific breakthrough is made, and a more realistic view of what it is like to be a scientist and work cooperatively with others (Fairweather & Fairweather, 2010). However, Lonsbury and Ellis (2002), quote a study by Huybrechts (2000) looking at the effects of adding science history and biography into a middle school science curriculum. One group was exposed to the material, while the other was given conventional instruction. At the end of the study the groups showed no significant differences in their understanding of the nature of science. In the same paper, Lonsbury and Ellis discuss the results of their own investigation, which showed that “incorporating science history into ‘normal’ science instruction helps students develop an understanding of nature of science concepts without detracting from content knowledge acquisition”. The balance seems to lie in favour of the efficacy of using science history to teach the nature of science.

Biographies can present scientists as human beings, while also communicating the scientific method. Bronowski speaks highly of James D. Watson’s book, The Double Helix, saying:

It communicates the spirit of science as no formal account has ever done. It will bring home to the non-scientist how the scientific method really works: that we invent a
model and then test its consequences, and that it is this conjunction of imagination and realism that constitutes the inductive method (Stent, 1976, p. 394).

Othman (2008) also finds The Double Helix to be highly entertaining and a useful adjunct in conveying the human side of science and scientists, even convincing students who thought scientists were “boring” to think otherwise. Author Joel Shurkin, quoted in Finn (1996, p. 15) says that “biography makes scientists look like humans”. Biographers can track down and decipher the original writings of scientists, document their important influences and create a starting point for understanding how scientists work (Heinz, 1988).

Fairweather offered the following paraphrased statements from students about what they found useful about studying biographies:

They shared their newfound appreciation for the fact that scientists spent a long time, even years, working on the same problem. Some students felt that science might be a lonely career. Many found that they better understood the importance of developing communication skills in order to convince others about the significance and validity of the work. Most gratifying to us were students' statements that they enjoyed reading a biography rather than studying from the science text because ‘a story’ made science more real for them (2010, p. 29).

Scientific biographies and autobiographies can also demonstrate the creative thought processes inherent in the scientific method. Medawar, in Stent (1976, p. 397) found The Double Helix to be an “object lesson of the nature of the creative process in science”. By following a scientist’s career over time a biographer can show the dynamism of science, and show that it can be as open-ended as composing music or writing a book, but much messier.
(Turner, 2009). McKinney and Michalovic (2004), contend that it takes little effort to add history to the teaching of science, using the example of Dmitri Mendeleev’s work on the periodic table. By looking at the historical background, students understand the thought processes behind Mendeleev’s arrangement of the elements in addition to learning the concept of periodicity.

Using biographical accounts in teaching has been shown to encourage class discussions. Were Watson and Crick’s treatment of their colleague Rosalind Franklin, as set out in *The Double Helix* (Watson, 1968), justifiable? Such a question could trigger discussion on what it means to finish first in science (Othman, 2008). Science classes can become reading circles where students can talk about biographical details such as plot, characters, theme and other key ideas (Traver, 1998). Exploration of students’ own questions in a biographical literature discussion often leads to more elaborate and complex discussions than those led by teachers (Straits & Nichols, 2007). Interactive historical vignettes, as developed by Roach and Wandersee (1995), tell a slice of a larger story and generate discussion between students and between the class and teacher. They also help students connect the past and present and make learning more interesting. Biographies can teach students about the complexities of the world, and how nothing operates in isolation (Hayes & Robinson, 2012).

**Additional advantages of biographies**

What other advantages do biographies offer to teachers? Students often feel as though they are circumventing more difficult work by reading a biography and teachers can make the most of that appeal in teaching students how individuals shape history (Nielsen, 2009). Teachers can focus on regional science and scientists to add interest to their classes (McKinney & Michalovic, 2004), because students learn more and with more enjoyment
when they are studying topics that are related to their own lives and interests (Engaging Schools: Fostering High School Students’ Motivation to Learn, 2003). Interactive historical vignettes make class enjoyable for students, and one teacher reported her students asked if they could repeat the exercise at the beginning of the next year as it had helped with both their interest and understanding (Wandersee & Roach, 1998). Teachers also enjoy using IHVs as they are attention-grabbing and inspirational (Roach & Wandersee, 1995). Othman (2008) asserts that biographies can have a positive effect on teacher attitudes and motivation, leading to improved teaching and learning. Biographies can sometimes provide details of early observational data that can be compared with more recent information in class (Clary & Wandersee, 2009).

Scientific accomplishment cannot operate outside historical context and circumstance (Wandersee & Roach, 1998). Biographies help provide the context that students need to understand this (Irwin, 2000). Monk and Osborne offer the following about the importance of context to scientific discovery:

Good stories are often about people, about their courage, ingenuity, and hopes. Thus, flesh must be added to the bare bones to provide details of the social and historical context. What was happening at the time that enabled one person to introduce a new way of thinking and what difficulties did they face in introducing their idea? …To address these, and allied questions, teachers need historical vignettes (1997, p. 417).

Clary and Wandersee (2009) incorporate vignettes about explorers when teaching about glacial processes and polar study and report that students are fascinated with the story of Douglas Mawson, the Australian geologist who explored the Antarctic in 1912. Left ill-equipped and starving after a crevasse claimed most of the equipment and food as well as one
of their party, Mawson and his companion Xavier Mertz were forced to retreat back to the base at Cape Denison. Mertz died on the way, leaving Mawson to travel the last 100 miles alone. Explorer biographies and autobiographies such as Mawson’s book *Home of the Blizzard* give insight into the political and cultural situation of the times in which they are set, and the pressures to succeed as well as the price of failure.

Reading and studying biographies help science education to be of value to all students, not just those interested in a career in the sciences. Students can develop their critical thinking abilities, openness to new ideas and intellectual honesty (Clary & Wandersee, 2009), improve their English writing marks (Clary et al., 2008), and sharpen their research skills by exploring the lives of scientists (McKinney & Michalovic, 2004). Students are motivated and encouraged to read more about science and scientists (Roach & Wandersee, 1993).

Present-day teachers are required to integrate diverse cultural and gender perspectives into their coursework and biographies can help illustrate that multiplicity and interdependence (Leckie, 2006). These perspectives will continue to gain in importance. Students should be introduced to the contributions and perspectives of those who, through cultural bias, have been historically overlooked. Otherwise they will not be prepared to live and interact with a shrinking world that will only further diversify over time (Leckie, 2006).

Even young children can benefit from such experiences. Cross-cultural understanding can be instilled in students from an early age by using picture book biographies (Morgan, 2009).

Stories of scientists intrigue students while demonstrating the trials and controversies of scientific enquiry (Fairweather & Fairweather, 2010). Scientific feuds such as that between
19th century palaeontologists Edward Cope and Othniel Marsh, show that scientists are capable of subterfuge, theft and espionage, but this “soap opera” history helps students see science as more interesting (Clary et al., 2008).

Students both enjoy and require a peek behind the scenes in order to understand what is really happening in science. If science seems like magic it is impossible to become scientifically literate (Wandersee & Roach, 1998). Biographies can be very useful in helping to remove some of the mystery and mythology behind science. Speaking of The Double Helix, Medawar in Stent (1976, p. 397) says, “no layman who reads this book with any kind of understanding will ever again think of the scientist as a man who cranks a machine of discovery”.

Biographies and role models
An important function of the biography is to provide role models and encouragement for women and minorities who are interested in studying science (McKinney & Michalovic, 2004; Mori & Larson, 2006). Teachers should present a selection of stories describing men and women from various cultures and time periods, doing work in different areas of science (Traver, 1998). This is important as there is considerable evidence showing that boys and girls are presented with gender specific messages, experiences and stereotypical perspectives from early on, through their school years and extra-curricular programs (Learning Science in Informal Environments: People, Places, and Pursuits, 2009). The role models provided by primary school staff may also strengthen traditional gender expectations. Primary school teachers are mostly women, while administrators are often men, leading to a sex-linked hierarchy among school personnel that may underpin fixed notions of male superiority (Development During Middle Childhood: The Years From Six to Twelve, 1984). Stereotypical images of white men as engineers and scientists have discouraged many young women from
pursuing a career in science (Brownlow, Smith, & Ellis, 2002), while contributions by women scientists have been overlooked in the classroom (Clary & Wandersee, 2006). This can be counteracted by using biographies to teach about scientific achievements by women. Mori and Larson discuss their survey on the results of teaching women’s issues:

One advantage of using biographies of successful contemporary women scientists as opposed to women scientists with extraordinary achievements is that these women seem more accessible and real. Students appreciated learning about the many ways for coping with challenges and the many paths to success. Together the results of the survey showed that biographies are an effective and memorable way to teach about science and women’s issues (2006, p. 4).

Biographies can be useful in contradicting existing stereotypes about female engineers and initiating perceptual change to close the gender gap in engineering (Hoh, 2009). Retrospective studies of women have shown that early experiences and role models have an effect on launching female scientists on their career path (Development During Middle Childhood: The Years From Six to Twelve, 1984).

Problems and pitfalls of using biography as a teaching tool for science
By introducing the human element to science it is inevitable that human flaws will tag along, and should be carefully balanced by presenting an opposing viewpoint. Othman (2008), believes that The Double Helix undermines scientific ethics with its premise of “win at all costs”, but she suggests that asking students to read portions of The Dark Lady (Rosalind Franklin’s biography) will help even out the picture and provoke discussion. The dinosaur feud of Marsh and Cope shows scientists in a bad light, with both men lying and cheating, so
Clary et al. (2008) recommend presenting students with other, more harmonious, scientific partnerships as well.

It is of the utmost importance that the facts and illustrations in biographies be accurate, but this is not always the case (Traver, 1998). Biographers must understand facts and theories in order to communicate them clearly, especially if they are analysing scientific work in the biography (Finn, 1996). Primary sources, like polar autobiographies, may be full of self-promotion and hyperbole (Clary & Wandersee, 2009). It is also important that biographies present their subjects in an unbiased, non-Eurocentric way (Zarrillo, 2008).

If a class is assigned a single biography to study, there is a danger they will view it as a whole, rather than part of a much larger endeavour. The individual scientist’s work should be linked to the larger field of inquiry (Turner, 2009). Mori and Larson (2006) also believe that using biography may lead to students believing that problems and issues belong only to a single scientist when they are in fact a more widespread phenomenon. Other sources should be introduced to prevent this. Fertig (2008) advises that biographies used in isolation of other historical material may cause students to think that individuals who participate in dramatic events have far more power than they actually do to suddenly change the structure of a social system without assistance from others.

So-called “potted biographies” often found in science textbooks invariably remove a scientist’s life from any social, historical and economic context, leaving nothing of value (Monk & Osborne, 1997). Similarly, just focusing on history will leave the student with a series of names, dates, and discoveries, leading to the conclusion that science is nothing but an exhaustive list of facts (Roach & Wandersee, 1995).
Introducing biography as a teaching tool may lead to resistance by both teacher and student. Teachers may feel that adding topics that show gaps in their own knowledge may undermine their status as an authority in the classroom (Monk & Osborne, 1997). Pupils may also be reluctant to accept more innovative teaching methods. They don’t expect reading, discussion and drama in a science class. They don’t want to find out that science isn’t indisputable or that theories change—they want security (Irwin, 2000). When teachers are choosing biographical material for a class, they must be sure the scientist profiled is intrinsically interesting and that the book is written with the intended audience in mind, otherwise students may put down the material without reading it (Finn, 1996).

Conclusions

The need for effective science communication within the education sector to produce both scientists and clear-thinking citizens is clear. Storytelling and its subset, biography, have been shown in some studies to help teachers and students form both an affective and cognitive understanding of the nature of science and its role in the larger world. Other studies have not found this connection. There are pitfalls of using biography, such as offering unethical role models or presenting too narrow a view of a scientist’s life or achievements, but these problems might be dealt with by adding appropriate balancing material.

More research is needed to maximize the effectiveness of studying scientist’s lives as a teaching tool, both in terms of the delivery methods and making sure that students are able to relate the life and work of the subject to the broader context of cultural and scientific history.
The qualities of a good biography

Introduction

Biographies can be a useful way to understand science and scientists, but they can also be problematic. They may be uninteresting, or present too narrow a view of the subject. They may encourage stereotypes rather than eliminate them. Sometimes they can be inaccurate in their portrayal of the scientific method or the cooperative nature of science.

So what qualities can be identified that help the science communicator or teacher evaluate a biography for its suitability as a tool for understanding science and scientists? I have created a checklist of six attributes, referred to as CHAIRS for the initial letter of each quality. This checklist is neither exhaustive nor compulsory; it is merely one of many tools that could be used to assess biographies for their suitability for use in understanding science and scientists. It provides a handy way of recalling qualities that could be useful, using a mnemonic structure. The qualities themselves were synthesized from my reading and evaluation of the literature on the use of biographical material in the classroom. I will discuss them in greater detail below.

Context—Using the history of science

Science is not created in a vacuum. It is always intimately involved with and changed by the culture of the time in which it takes place. Placing a scientist in history, and discussing the ways in which a particular theorem or idea has changed over time, opens the door for philosophical questions such as “How do we know?” and “What is the evidence for…” These questions invite students to offer prior knowledge, participating in the process of learning in a constructivist context (Monk & Osborne, 1997). The authors also assert:
It is our contention that such a pedagogic strategy, whose focus is always on the conceptual explanation and its justification, would not only support the *learning of science* but *learning about science* (1997, p. 406).

The history of science helps students with placing a scientist in context, and also aids students in identifying with different scientists. Teachers can accomplish this without compromising class time spent on other content. McKinney and Michalovic, in *Teaching the stories of scientists and their discoveries* state:

> Our experiences show that using strategies appropriate to the science content being taught allows teachers to include the history of science in classes without sacrificing time or content. By adding historical context to any course concepts, instructors can teach a wide range of ideas related to inquiry and the nature of science. Teachers can present role models to a wide variety of students. And by telling the stories of scientists and their discoveries, teachers can motivate students to greater interest and participation in science. (2004, p. 51)

**Summary**

“Telling the stories of scientists” can mean using biography, but only those which appropriately place the scientists within the context of their social, cultural and even spiritual milieu. Such information helps students understand the idea that scientific enquiry is inextricably linked with the time and place it is performed and can create the opportunity for interesting class discussions. These discussions, as seen in a constructivist context, allow students to participate in the exchange of ideas with the instructor.
Humanness—Presenting scientists as human beings

Science author Georgina Ferry believes that biography is a good tool for portraying the lives of scientists in a realistic way and portraying the vagaries of science (Jones, 2010). Ferry wrote a biography of Dorothy Hodgkin, the only British female science Nobel laureate, which delved into her home life as a mother with three children and a largely absent husband because she wanted to find out “how [Hodgkin] negotiated that.” She called the book *Dorothy Hodgkin: A Life*, deliberately presenting the book as literary biography rather than a scientific one. Making a book about a scientist’s personal as well professional life invites those not interested in science to learn about it in the context of learning more about the person. Although it may be a less efficient way of presenting science, rather than just stating the facts, using contextual information helps draw the reader into the story.

It is important when evaluating a biography to look at the portrayal of the person’s life outside of their scientific accomplishments, as that provides the hook that draws the reader into the story. Joel Shurkin, quoted in Finn’s article *Opinions Differ On The Features Of A Well-Done Scientific Biography*, (1996, p. 15) talks about two things that make a good scientific biography: it must deal with a scientist who is reasonably well known and the scientist must have an interesting life outside of his or her discoveries. He states, “A biography of an uninteresting person is an uninteresting biography no matter what kind of work they've done.”

Summary

A good biography is one which presents an interesting subject in a way that draws the reader into the story by adding details about that person’s life outside of science. Disguising science
in the form of a “literary biography” may entice resistant readers to learn more about science while they are learning about a person’s life.

**Accuracy—Hagiography vs pathography and factual errors**

If the writing in a biography is not accurate then it is not a good biography for the purpose of teaching science. This inaccuracy can take two forms. First there is the matter of the scientist’s life, both inside the laboratory and at home. If the biography is a recitation of only the positive contributions a scientist has made (hagiography) can it show science in an uncritical light? Do those biographies which focus only on the negative aspects of a scientist’s personality or work (pathography) present a balanced picture? According to Paradowski, both the public and publishers put pressure on biographers “not to be boring”—leading to distortions and even fabrications in order to spice up a work. He goes on to say:

> Complex lives may support several interpretations, each of which may entail dangers—of finding certainty where none exists, of distorting facts and events to make the subject’s life fit the procrustean bed of an interpretive hypothesis (Paradowski, 1996, p. 7).

**Balanced**

So we must take care to present a balanced picture, one that is neither salacious nor bland. Is it necessary to know that Einstein was an unfaithful, ego-driven man who probably beat his first wife, Mileva Marić, and discounted her contributions to his theories (Paradowski, 1996)? Or should we be content with a picture of Einstein as a brilliant scientist and a gentle humanist? The answer lies somewhere in the middle.
Factual

The second facet of accuracy has to do with the science itself. It can and should be simplified for the layperson, but not to the point that it becomes untruthful. Rob Traver (1998) finds that “a number of” scientific biographies contain errors and misconceptions both in the text and illustrations. Reading lists of good-quality biographies are available from many sources on the Internet, and should be used. If our aim is to communicate science, then it must include verifiably correct information. Adding references or further reading lists is important, both for the sake of corroboration and to provide the reader with further resources.

Summary

A good biography is one that presents a balanced picture of the subject’s working life and personality, as well as being accurate, while still simplifying the science involved for laypeople. It is often useful to add lists for further reading and a bibliography.

Interest—Creating compelling characters and voices

No matter how accurate or compelling a biography is, if it fails to hold the reader’s attention it will be a poor tool for communicating science. Just presenting facts will not be enough. If the story does not provide a connection that echoes the reader’s experience it will come across as inauthentic. “Citizens detect and dislike the inflated language of experts,” (Warhover, 2000). A disengaged reader does not pay attention to the text, can easily be distracted, and wants to finish as quickly as possible (Beck, McKeown, & Worthy, 1995). Not an ideal recipe for understanding science.
Engagement

Kaj Sand-Jensen in a tongue-in-cheek paper called *How to write consistently boring scientific literature*, offers hints for achieving this goal. Although this paper is aimed at professional peer-reviewed journal writing, the following tips are just as true for any type of science writing—especially that aimed for the masses.

- Avoid focus
- Avoid originality and personality
- Write long contributions
- Remove implications and speculations
- Leave out illustrations
- Omit necessary steps of reasoning
- Use many abbreviations and terms
- Suppress humour and flowery language
- Degrade biology to statistics
- Quote numerous papers for trivial statements, (Sand-Jensen, 2007, pp. 723-726)

Russel Hirst, an instructor at the Science Communication Center at the University of Tennessee, bewails the ideas that his students have about science writing:

And somehow they’ve [students] gotten the idea that professional scientific writing must not only avoid anything colourful, dramatic, suspenseful, or otherwise emotional—but it must also avoid simplicity, prefer ponderous prose, and suppress the subjectivity of human voice (2013, p. 434).
Voicing

Adding a human “voice” to science writing has been shown to increase interest and retained knowledge. Voice is characterized by transferring some of the features of speech such as using active versus passive verbs and flowing language (Beck et al., 1995).

A Caution

It is important to note this caveat however: texts that provided too much in the way of “seductive details” caused the students to remember less about the core knowledge imparted, as they were more interested in the unimportant information spicing up the narrative (Garner, Gillingham, & White, 1989). Nor can strictly oral writing, with its incomplete sentences and frequent topic changes, be good for comprehension (Beck et al., 1995).

Summary

A good biography is one that holds the student’s attention while still allowing for comprehension and retention of the core information required, as well as sparking interest and involvement.

Representation—Dispelling stereotypes

Yin Kiong Hoh found that biographies can be a useful way to change perceptions about stereotypes. The biographies used in her study provided detailed information about the personal lives and work experiences of the female bioengineers who successfully balanced career and life options (Hoh, 2009). Again, adding personal details fleshed out the subject of
the biography, inviting readers to abandon the nerdy, white male scientist/engineer stereotypes that they often acquired as children.

In a seminal study carried out by Chambers (1983), primary school students were asked to draw a scientist. Researchers evaluated the completed images to see when stereotypes began to colour student’s perceptions. By fourth grade (year 5), a majority of students had been hooked by the portrayal of scientists in the media. They overwhelmingly drew scientists as middle-aged or elderly white men, wearing white coats, with facial hair and glasses. Scientists were characterized as working in chemistry laboratories, and some students pictured them creating weapons of mass destruction. This is troubling. A useful biography is one that challenges these stereotypes, and provides students with a fuller picture of the range of ethnic groups and gender, as well as the good work that scientists do.

Avraamidou, (2013), also found the same sorts of stereotypes amongst students, and countered this by having them interact with a scientist in class who was young, trendy and worked in a non-stereotypical field (metrology). The students were encouraged to ask the scientist questions about their life outside of work and this gathering of biographical details changed their perceptions of scientists and encouraged them to think of science as a career.

Summary
Using biography to communicate science presents a good opportunity to introduce a wide variety of scientists working in differing conditions, thereby allowing readers to relate to the
idea of “doing science” even if they are not white males with facial hair and poor eyesight who like chemistry.

Synergism—Busting the myth of the solitary scientist

It is important when using biographies to teach science that students do not come away with the idea that an important scientific discovery is often accomplished by a single scientist, without help from others.

Fairweather found that using biography to teach science resulted in some students perceiving science as a “lonely career” (2010). This is troubling for two reasons. Firstly, adding a negative connotation (lonely) to the practice of science might make students less likely to think of it as a vocation, and secondly because teamwork in science is important and has increased markedly over time, as Casadevall and Fang relate:

Studies of publications over the past 50 years show that teams increasingly dominate science and are contributing the highest-impact research. Collaborators, consortia and networks are essential for tackling interdisciplinary problems and massive undertakings, such as the Human Genome Project (2012, p. 13).

The scientist as solitary practitioner is closely tied with the stereotype of the mad scientist, as described by Weart:

But to newspaper and magazine writers, the scientist was an odd character who ignored mundane concerns, risking his health and scorning riches (as scientists
themselves said), an unworldly "wizard" who isolated himself in the pursuit of tremendous secrets (1988, p. 34).

Although the solitary scientist is often a feature of novels (Mary Shelley’s *Frankenstein; or, The Modern Prometheus* would be one such example) there are biographies and especially autobiographies which also perpetuate the myth of non-collaborative work. Joshua Lederberg, in the introduction to volume three of *The Excitement and Fascination of Science* talks about the problems with the current state of scientific autobiography (bold emphasis mine):

> While the scientist’s restraint from self-description may have helped to preserve the purity of the logic of justification, the indispensable critical function in science, it has also deprived us of insight into the personal and social processes that motivate discovery and pervade the scientific effort. We are left with narratives of chase, competition, and interpersonal stress rather than accounts of imagination gratified and cooperation achieved. Today’s youngsters contemplating scientific careers indeed deserve more life-sized and sophisticated portraits of their role models than my generation had in de Kruif’s *Microbe Hunters* (1926)-but also truer portraits than the melodrama that now makes the bestseller lists and electronic media (1990, p. xvii).

Showing that cooperation exists amongst scientists can also go some distance to righting the grave disservice done to “scientific partnerships” that exist between married couples. The contributions of female partners, though extremely valuable in their own right, have often
been discounted in the literature due to the social and cultural constraints of the times in which the research took place (Lyknes, 2012).

Summary
Science communicators should take care to select biographies that present science as a cooperative enterprise, both to prevent the perception that science is a “lonely” occupation and to give credit to scientific cooperation and partnerships.

Conclusions
In my discussion of the qualities of a good biography, I have focussed on six attributes (abbreviated as the mnemonic CHAIRS) that differentiate limited and misleading texts with those that provide a balanced picture of scientific methods and scientists. Biographies which place science in context of history are useful for engendering class discussion and helping students to “identify with science”. Presenting scientists as human beings, rather than isolated automatons, helps students understand the scientific method in context, and dispels stereotypes about science and scientists. Creating interest through active and flowing language, as well as judicious use of so-called “seductive details” can help improve a student’s engagement with a text. I have also shown how important accuracy is to biography, both from the standpoint of painting a balanced picture (neither hagiography nor pathography) of a scientist’s life and also the need for simplification of scientific terms that retains the essential truth of the research. Lastly, I have discussed how a good biography will present the work of science as more collaborative and cooperative, rather than perpetuating the myth of the “solitary (and sometimes mad) scientist”.
The biographical works of Sheila Natusch

Introduction

Sheila (Traill) Natusch is a New Zealand author and illustrator of some forty books and many other articles on biology, botany, geology, biography, history, and travel. She was born in Invercargill in 1926, and spent her formative years on Stewart Island, where her father, Roy Traill, served as a ranger and guide. After attending Southland Girl’s High School in Invercargill, she earned Bachelor’s and Master’s degrees at the University of Otago, with qualifications in English, French and teaching. She moved to Wellington in 1949, first working for the National Library and then the Dominion Museum. After a pay dispute, she took up employment with the Correspondence School and it was there that she began putting together the first of her small nature guides, as a resource for her students. Later she wrote and illustrated *Animals of New Zealand*, an extensive guide to the fauna from one-celled creatures to whales.

She turned to history and biography in the late sixties, publishing *Brother Wohlers* (1969), an account of her great-grandfather’s life as a missionary on Ruapuke, a small island off the coast of Stewart Island. Although *Brother Wohlers* won a Hubert Church award in 1970, and remains Natusch’s best known biographical work, I will not assess it because it does not contain as much natural history as others she published later in her career. These other biographies— *Roy Traill of Stewart Island* (1991) and *William Swainson of Fern Grove* (1998)—deal with naturalists (both professional and hobbyist). The subjects of these biographies are not scientists in the modern sense of the word, but both were deeply interested in the natural world and collected and identified its flora and fauna. Roy Traill did this in the course of his work as a ranger on Stewart Island, although he had a lively interest
in natural history that transcended his day to day concerns about possums and deer and their damage to the landscape. William Swainson was a collector and renowned illustrator who exchanged information with other naturalists of his day. His scientific achievements were part of his identity as a “landed gentleman” and a source of considerable pride, but not up to the scientific standards we hold today. Why then should works about these men be included in an evaluation of scientific biographies? They contain much in the way of scientific information disguised as reminiscence and history. They impart stories that readers will find entertaining; a snapshot of two lives dedicated to the understanding of nature.

The autobiographical An Island Called Home, first published in 1992, is a first person account of Sheila Natusch’s childhood on Stewart Island. Although Natusch studied both botany and geology at the University of Otago, she has no professional qualifications in a scientific field. However, the book has been included because it presents a great deal of information about the natural history of Stewart Island in an interesting format—the retelling of childhood memories.

I will evaluate each of these biographical works on their merits for understanding science and scientists using the quality checklist (CHAIRS) which I described earlier in this thesis. The qualities are:

- **Context**—Using the history of science
- **Humanness**—Presenting scientists as rounded human beings
- **Accuracy**—Hagiography vs pathography and factual errors
- **Interest**—Creating compelling characters and voices
- **Representation**—Dispelling stereotypes
Synergism—Busting the myth of the solitary scientist

Some of the qualities may not apply to any given work, but I will try to paint as complete a picture as possible of the advantages and shortcomings of each book.

Roy Traill of Stewart Island

Introduction

This biography, of Sheila Natusch’s father Roy Traill, was first published in 1991, by Craig Print and later republished by Nestegg Press (Natusch’s own imprint). The book is a trade size paperback, with text, a colour cover and black and white illustrations and photographs. It possesses a serviceable index, and is 164 pages long with a short appendix of Traill family letters.

Roy Traill of Stewart Island tells Traill’s life story, as well as a history of Stewart Island, with which he is strongly identified. Roy Traill was born, and lived most of his long life on Stewart Island, where he served as a ranger and guide. He was not a scientist in any sense of the word, but he was a man schooled in natural history since birth, whose inquiring mind led him to correspond and cooperate with many scientists around New Zealand and the world. In the sections below I will evaluate this book against the qualities of a good biography outlined earlier with the CHAIRS checklist.

Context

The book begins with a history of the early Traills, many of whom were naturalists in their own right. Charles Traill, Roy Traill’s uncle, was the first to settle on Ulva, an islet off the
coast of Stewart Island. He is portrayed as an ardent collector of shells, one of which now bears his name—*Cuspidaria trailii*. This context allows us to trace Traill’s interest in nature back through several generations as well as placing him firmly in the amateur scientist tradition. Forrest Mims, in the journal *Science*, describes the profound effects of the amateur on modern scientific enquiry:

> Contemporary science has its roots in the achievements of amateur scientists of centuries past. Although they lacked what we would define as formal scientific training, they deciphered the basic laws of physics and principles of chemistry. They invented instruments. And they discovered, documented, sketched, and painted planets, comets, fossils, and species (1999, p. 55).

**Humanness**

In the book *Traill* is portrayed in many roles from war veteran to fisherman to Stewart Island ranger and guide. He is not, however, a scientist. His interest in natural history was fitted in and around his other activities—he sketched birds, collected and identified bones and ferried a whole host of scientists round Stewart and the surrounding islands. *Roy Traill of Stewart Island* portrays Traill as both an intelligent and curious man who often took time for friends and also as a martinet at home who would insult his wife in front of company, and frequently lost his temper over trivialities. It seems a balanced picture.

**Accuracy**

We have only the author’s personal experience to vouchsafe the accuracy of many of the stories presented, but Natusch’s reputation as a careful and knowledgeable writer means that we can trust her reporting.
Interest

Natusch has an excellent writing style for science communication, combining her extensive knowledge of botany and biology with warm and personal language. She writes as if she is speaking long flowing sentences on the page, as the following excerpt from *Roy Traill of Stewart Island* attests:

Over at the Island, gorse was blazing as richly yellow along the roadsides of Lonnekers and Ringaringa beaches, mingled with the beach scents of sea, kelp and damp sand, bluegum leaves and gumnuts. Early dawn choruses were led by tuis and bellbirds, with blackbirds joining in; there were plenty of kakas and pigeons about, and some fantails; now and then the chattering of parakeets sounded overhead. There came the tentative beginning of a shining cuckoo’s call.

Bellbird pairs were singing in duet, on beginning the melody in the lower register, the other chiming in with an almost hypersonic closing phrase. At night, penguins, a morepork and kakas were all heard calling out at the same time. The bush smelt damp and ferny and earthy and glopping sounds drifted from channels among the rocks.

This is the Island of which Roy Traill was obliged in the end to take leave (1991, p. 149).

Although the book does contain quite a bit of natural history, as shown in the passage above, it contains little about scientific method in general.

Representation

Although Traill was not a scientist it is worth noting that his life centred around the natural history of his home and he assisted many scientists with their work on Stewart Island. Using
his biography might encourage readers to take up an interest in “civilian science” or learn more about the flora and fauna of Stewart Island. It also mentions quite a few female scientists by name, and describes their work.

Synergism

Traill’s biography would certainly be a useful tool for showing the collaborative nature of science. He assisted many scientists, both domestic and international, both to source specimens and reach isolated areas for study. This excerpt provides an example:

Botanists like Misses L. B. Moore and L. Cranwell were able to collect their own Stewart Island plants with Roy’s help; William Martin went moss-hunting in the Rakeahua-Table Hill region. Zoologists came too—Betty Batham and Val Todd from the University of Otago, and Averil Lysaght from Victoria University. Charlie Wright, Rob Stanley, Brian Bary, Bill Dawbin—all knew him well and benefitted from his knowledge. Many overseas visitors sought him out: Dr Egbert Walker from the Smithsonian Institution; Olaus Muri; Ulrich Scweinfurth from the University of Bonn (S. Natusch, 1991, p. 134).

Summary

Roy Traill of Stewart Island would, in my opinion, provide some of the desired qualities for a biography to be used in science communication, but not all. It places him in the context of other amateur naturalists, especially those within his ancestry, but does not look at the history of science generally. It shows him as human, with both good qualities and those less-desirable. It is accurate, to the best of my knowledge. It contains many passages that spark
interest in zoology and botany, and beautifully flowing language. While Traill was not a scientist, the book does highlight the contributions by female scientists that he assisted, which could allay some stereotypes. And finally, it certainly shows the synergistic nature of science, as it portrays him as helping in many scientific endeavours with eminent scientists of his day.

William Swainson of Fern Grove

Introduction
Sheila Natusch was asked to write William Swainson’s biography by his great-grandson Geoffrey Swainson in 1983. The younger Swainson had amassed a large collection of his ancestor’s letters, artworks and papers and was looking for an author to redact this material into a coherent life story that was to be published in a lavishly illustrated large format book. The funds for this did not eventuate, so the resulting volume was a 170-page paperback first published in 1987. It remains in print through Nestegg Press. The book has black and white illustrations and photographs, some of which can only be described as of poor quality, and includes an index. The text is dense and single-spaced, which might be off-putting for some readers.

The subject of this biography, William John Swainson, was born in London in 1789 of well-to-do parents. A speech impediment ended his academic career early and he worked for a time as clerk, before taking up a commission in the Army, serving in Malta and Sicily. He was a keen amateur naturalist, accumulating many specimens, and used his artist talent to record many more. He emigrated to New Zealand in 1841, and continued many ambitious natural history projects there, including a survey of conchology in the Pacific that did not come to fruition. Swainson is most remembered for his beautifully rendered scientific
drawings and his mistaken belief in the Quinary Classification system. He died in Lower Hutt in 1855.

Using the CHAIRS checklist, I will evaluate William Swainson of Fern Grove in the following sections.

Context
Swainson was born in 1789 and died in 1855, and Natusch is careful to situate him within the momentous historical events that took place in Europe and New Zealand during his lifetime. These included the Napoleonic Wars, an outbreak of the plague in 1812 and the early skirmishes of the New Zealand Land Wars. The history of science is also well-represented, as Swainson was a proponent of the quinary theory of scientific classification, and wrote extensively on taxonomy. The following excerpt from William Swainson of Fern Grove would give the reader an interesting take on early efforts at taxonomy:

William’s Animal Kingdom falls into:

1. Vertebrated animals: Quadrupeds—by which he means land-mammals, excluding man; Reptiles and Amphibians; Fishes
2. Annulose animals (Insects wingless and winged; Worms and “other classes”)
3. Molluscous or “soft” animals (Radiata—starfish and their kind; Polypes or corals etc., Naked Testacea or Shellfish)

3 The quinary theory of classification was devised by British entomologist William Sharpe MacLeay (1792-1865), to place all living things within a framework. It’s consistent nature, using groups of five and subsidiary groups of three, was supposed to show the hand of God, the Creator, in the regularity of the classification of species.
4 Man’s place was described in the first chapter of Swainson’s 1835 Classification of Quadrupeds as being “a little lower than the angels”. 
—whereas now we place the animals without backbones in more than a score of separate phyla, and those with backbones, and their primitive forerunner, in the single phylum Chordata. Man takes his place among the salps, sea-squirts, lampreys, fishes, birds and mammals, therefore, as just another chordate creature. The chordates are greatly outnumbered by the non-chordates, and angels (as distinct from angelfish) are not on the list at all (S. Natusch, 1998).

Natusch’s use of the history of scientific thought on classification and other endeavours, as well as her presentation of current theories, gives excellent context to Swainson’s life story and works.

Humanness

Swainson is presented as a meticulous, hard-working scientific writer and illustrator who amassed a huge collection of specimens in his life time. He is also shown as depressive, suffering from migraines, and a frequent critic of the works of others. His home life is described in detail, often with accompanying quotes from his correspondence, as is his military service in Malta and New Zealand.

Accuracy

Unknown, but again we have Natusch’s excellent reputation and the fact she had access to a great deal of original documentation, by which to judge this work.
Interest

William Swainson of Fern Grove is a long book, with densely spaced text broken by only a few illustrations. But the language is enticing, from the very first page, as shown in this excerpt:

William!

Y-y—yes, f-f-father?

The nine-year-old toes curled. What was it this time, faulty spelling, punctuation or grammar? On such a beautiful morning too, with the outside world alive with birds and buzzing with insects…

…WILLIAM!

The guilty young gaze shifted its focus from the glorious window to the interior (gloomy only in contrast) of a pleasant book-lined study. There came a paternal sigh.

What could be done with a son whose only thought, waking or sleeping, was Natural History (S. Natusch, 1998, p. 9)?

From these few words we learn that William was a lad afflicted with a stutter who grew up in a comfortable household, was obsessed with Natural History but a poor student otherwise, and a trial to his father. Active writing that certainly catches the reader’s attention and which is repeated throughout the book.
Representation

Swainson was a European male of privileged upbringing, who dove into the study of natural history while supported by a legacy from his father and his own military pension. There is little in the book to recommend it as a text for encouraging equality and diversity.

Synergism

Although by all accounts Swainson was a difficult person to work with the book does describe his relationship with another New Zealand naturalist, Walter Mantell (1820-1895), mostly through excerpts from their correspondence. This correspondence seems to be more about Swainson’s complaints rather than scientific process, so the book cannot be said to show the cooperation between scientists in any good light.

Summary

Although Swainson is certainly an interesting character who, through his illustrations, contributed much to the advancement of natural history during his day, the book William Swainson of Fern Grove does not, on balance, meet the CHAIRS checklist for a good biography. While it does provide some context about the development of taxonomy before Darwin, and is well-written, it provides little in the way of removing stereotypes from science, and, as Swainson himself was not the cooperative type, does not show the collaboration necessary for the advancement of science, except perhaps as a cautionary tale.
An Island Called Home

Introduction

Although ostensibly a history and guide to Stewart Island, *An Island Called Home* contains much autobiographical content, which means it could potentially be used as a vehicle for science communication. It was first published in 1992, by Craig Print, and remains available through Nestegg Press. The book is a trade paperback, with a colour cover and some colour illustrations (paintings by Natusch’s mother Dorothea Traill) as well as many black and white drawings by the author. The text is single-spaced, but clearly readable due to the high quality printing. There is a short index and two lengthy appendices, one of which is a collection of other pieces Natusch has written about Stewart Island.

Natusch was born in Invercargill and spent her early life on Stewart Island, ably taught natural history by her father, the ranger Roy Traill. This upbringing gave her an intimate and expert view of the flora, fauna and geomorphology of the Island, which she enhanced through University study of zoology and botany and geology. She has written and illustrated many books that deal with science communication, the best known of which is *Animals of New Zealand*, a survey of everything from one-celled creatures to whales.

In the sections below I will evaluate *An Island Called Home* with the CHAIRS checklist.

Context

The chapter called “The Naturalists” contains some good information about the history of science in New Zealand as practiced by amateurs:
During the 1960’s, when the eventual nature and functions of our premier scientific body the Royal Society of New Zealand were being debated with some vigour, someone was heard to remark: “The day of the dilettante-naturalist is now over”.

This was not true towards the end of the 1940s, nor is it the whole truth now; it was wholly untrue, of course, last century, from Captain Cook’s time on (leaving aside Polynesian ‘blanket’ classification: e.g. of lowly centipedes, fern rhizomes and other subterraneans in one creepy group). In the long summer months I spent on Stewart Island before heading north to look for a job … I found naturalists of the old school very much alive (S. Natusch, 1992, p. 74).

There is also a section on professionals who visited the Island during her childhood and beyond, especially Lance Richdale, the eminent ornithologist, and botanist Leonard Cockayne.

Humanness

The book is liberally sprinkled with personal anecdotes of Natusch’s life on Stewart Island, from her experiences with primary school, where she was bullied and called “Kaka Beak” to her early efforts as a science writer—the Listener magazine turned down her first article, written at age sixteen. She comes across as both adventurous and mischievous, but with a core of curiosity and intelligence which goes a long way to explaining her later successes as a science communicator.
Accuracy
As far as my own research shows, the book is accurate. It portrays Natusch as a human being with both positive and negative characteristics, and gives a good picture of her early life on the island.

Interest
The language of An Island Called Home is evocative, portraying the abundance of flora and fauna of Stewart Island with the sweetness of reminiscence:

The old shore, indestructible and permanent as it seemed to us youngsters, was lilac- and white in seasons with *Hebe elliptica* flowers, and under the muttonbird trees in a particular place we could always be sure of finding spider orchids, their long fine feelers poking up from among the glistening pale green leaves. Stewart Island plants come up in surprising places; a road, recently widened, is blue in the summer holidays with hundreds of *Thelymitra* orchids—not the common Half Moon Bay kind, but the one that grows on the inland flats. The fine, spore-like seeds must have been “borne swiftly by the western gale” (our western gales are nothing if not swift) and the moist, sunny clay bank did the rest (S. Natusch, 1992, p. 19).

As the main character of this autobiography, Natusch is a person of some interest—she was given a Hubert Church award in 1970 for *Brother Wohlers*, was elected to the Royal Society of New Zealand’s council (possibly the only arts graduate ever to be so honoured) and was made a member of the Order of Merit of New Zealand for services to writing and illustration.
Representation

Natusch’s life, as portrayed in An Island Called Home, gives us some insight into her childhood love of nature and how that translated into a career as a science writer. As a woman from an impoverished background (the house where she was raised was heated with nothing but a coal range and fireplace and did not acquire electricity until long after she had left home) and a non-traditional education (she majored in English and French at University rather than a scientific discipline) Natusch represents an inspirational figure for others who are seeking a place in the sciences.

Synergism

Although not a main feature of the book, cooperation between scientists, naturalists and collectors is portrayed as a primary method for the advancement of science. The writing about this cooperation is often seasoned with humour, as the following excerpt shows:

That same night, as I was cleaning my teeth in the creek that flows so handily behind the Table Hill hut, my eye was caught, in the dusky half-light, by streaming, fanning tresses of mossy growth anchored in the creek and trailing from the cold rocky basement of that crystalline upland water.

“Is this,” I enquired modestly on re-entry, “your Blindiopsis?”—and was immediately sorry I hadn’t left the collector to find it for himself.

At least his excellent description had ensured that I knew it when I dipped my toothbrush in against it (S. Natusch, 1992, p. 76).
Summary

Natusch’s autobiography could certainly be useful in communicating science. It places the story of Stewart Island’s natural history in the context of exploration and amateur naturalists. It shows the author in very human ways, presenting her as both somewhat mischievous and clever as a child, with an early-developing interest in science. Its accuracy can be independently verified by my research into her life. The writing is engaging and evocative, and manages to communicate a great deal about the flora, fauna, history and geomorphology of Stewart Island. As a method for countering stereotypes it provides an excellent example in Natusch, who overcame an impoverished background to study science and writing at university and became one of the premier science communicators of her day. Finally, it discusses the cooperation between scientists, naturalists and amateurs instructively, with amusing anecdotes.

Conclusions

Of all of Natusch’s biographies, it is my belief that An Island Called Home would be the most valuable science communication tool—one that children and adults would find interesting while also teaching them about the wonders of Stewart Island. It covers everything from whale strandings to astronomy, contains Natusch’s thoughts on conservation, and gives a good overview of the history of the Island, from early exploration to Maori settlement to the present-day effects of tourism to the natural conditions of the island. With the most illustrations and the best layout of the three biographical books I have evaluated by the CHAIRS checklist it is by far the easiest to read. Roy Traill of Stewart Island is also engagingly written, but contains less information directly related to science. William Swainson of Fern Grove, with its dense text and lack of illustrations, does not meet many of
the CHAIRS checklist requirements, despite the fact it is well-research and written with a conversational style.
An Evaluation of *Knowing Sheila*

The biography *Knowing Sheila: The Life of Sheila Natusch* is the creative component of this thesis. My research began in October 2012, when I visited Natusch and did four hours of recorded interviews. I supplemented this with extensive correspondence with her, trips to the Hocken and Alexander Turnbull libraries, as well as visits to Stewart Island, Invercargill and Wellington. The book is approximately 41,000 words long, and is supplemented with a number of family photographs, drawings by Sheila Natusch and others, a map of Stewart Island and a family tree of her Traill ancestry. *Knowing Sheila* has not yet appeared in print. I will use the CHAIRS checklist to discuss in the sections below whether *Knowing Sheila* would be a suitable biography for science communication.

Introduction

*Knowing Sheila* is not a standard biography, but rather an exploration of writing a biography about Sheila Natusch, with some of my personal thoughts and experiences included. It attempts to answer the question of why Natusch’s works were successful as a method for communicating science, even those books whose subjects seem far removed from it. It is not entirely chronological—the book skips from the present day to Natusch’s childhood and early years on Stewart Island, before following her life and writings on a decade by decade basis. It contains an analysis of much of Natusch’s writings on science, biography and history as well as a look at her overall career as a writer. I have visited with Natusch several times and some of those visits provide descriptive material for the book. I have also written about research-gathering expeditions that I made to Stewart Island, Invercargill and Wellington. The book ends with a glimpse of Natusch’s old age (she is 89 at the time of this writing) and a summing up of her contributions to society through her writing and illustrations.
Context

In *Knowing Sheila*, I place Natusch in a historical context by adding descriptive material about the events taking place during various stages of her life, including the depression of the 30’s, and World War 2.

Because Natusch is not a scientist, discussing her place in the history of science was deemed inappropriate. I do evaluate each of Natusch’s most important works, and place them within the larger picture of science communication in New Zealand.

Humanness

I found Natusch an easy subject to work with except in the area of delving into the darker areas of her life. She tended to make light of difficulties, such as her father’s terrible temper or the bullying she endured at school. Within those limitations, the book shows Natusch as both an overwhelmingly positive person, and one whose life was shadowed, at times, by grief and the effect this had on her. The excerpt below gives an example:

Sheila duly went to Dr Falla to ask for a raise, but he would have none of it. “I had become engaged and I thought, museum pay is going to get me nowhere and I won’t even be able to buy tea towels, not that I was greatly interested.” So Sheila found herself a job at the Correspondence School, and submitted her two-week notice to the Museum. When she told Dr Falla she was leaving he remarked caustically, “It’s always the same with people who get their friends to inch them into a position.” Even now, after almost 65 years she still remembers her hurt and outrage at this remark—

“I thought ‘you bastard’ but there was nothing I could say. Because of my relationship with my father when I just used to be struck dumb when he was
having one of his rampages, I just couldn’t speak. I sort of rushed off and had a good old weep and that was that, end of museum and beginning of correspondence.”

Why did this offhand jibe upset Sheila so? After all she already had a new job; one that paid better. Possibly it was the implication that she had not *earned* her position at the Museum, but had merely taken up something given to her on a platter. Sheila could not abide patronising behaviour, even by one of the most highly respected scientists in this country. She had worked incredibly hard to get to Wellington with her MA, and to have the accomplishment belittled was highly upsetting. But, as is typical, once she had gotten over her hurt, she picked herself up and moved on (Hamel, 2015).

The book also provides information on Natusch’s formative years, her relationships with her family and her home life with husband Gilbert, as well as her writing process and publishing history. All this information helps to build a complete picture of the subject and her books and illustrations.

I believe that Natusch is shown in a balanced way in *Knowing Sheila* and that it would qualify as a good biography as far as humanness is concerned. I discuss both positive points; Natusch’s talent, her determination and successful career as an author and illustrator; and also negatives; her difficulties with standing up for herself, her sometimes fraught relationships with employers and publishers, and the many tragedies in her life.
Accuracy

The book is accurate within the boundaries I describe in the conclusion, in that I could not interview everyone who had known Natusch or read everything that had been published about her.

Interest

Natusch is a fascinating person, and translates well as a subject of a biography. In her stories of her childhood growing up on Stewart Island, to her difficulties and ultimate triumphs with higher education, to her career as a science communicator and author of over forty books, as well as the various tragedies she has endured, Natusch is portrayed as a woman who was determined to succeed on her own terms, in the face of many setbacks.

The language of Knowing Sheila is informal, and touched by my experiences with writing the book as well as my many encounters with Natusch. In the introduction, I describe Natusch’s house:

I follow her along a heavily shaded path, with the house straight ahead. A cat greets us, named Bella, and Sheila tells me it is half wild, though it seems friendly enough. We go inside and back in time simultaneously. It is very dark along the passage. There are many things to step over and round. Books and papers and drawings in boxes, in shelves, in piles. There is no place in the kitchen where one could put down anything bigger than a tea cup. A coal range in an alcove takes pride of place along one wall, but we don't linger there. In the living room there is a window, and by the window there are two worn chairs facing one another, an arrangement that speaks of
many comfortable chats. The sun sparkles on the water, and on the distant snow-topped peaks of the seaward and landward Kaikouras. I don't know their names, of course, but she does, and introduces them almost like friends (Hamel, 2015).

This conversational tone continues through the book, giving it a gentle flow that is easy to read and understand. The non-linear structure does not create issues, as it begins and ends with Natusch’s present circumstances, while the middle section deals with her life, publications and travel in mostly chronological fashion, with occasional present-day anecdotes.

Knowing Sheila is a biography about an interesting person, written with an informal style that makes for relaxed reading. It includes content that invites readers to learn more about science, from the flora and fauna of Stewart Island, to the activities of amateur naturalists. It also contains many quotes from Natusch’s own works, which may encourage readers to seek out her books directly. It meets the interest requirement in the CHAIRS checklist.

Representation

Although Natusch is not a scientist, she spent her life studying, sketching and cataloguing the flora and fauna of New Zealand as well as the many countries she visited in her travels. She was determined to acquire university training in the sciences, despite her impoverished background and family resistance due to her gender. As an antidote to the stereotypical image of a scientist she provides a refreshing and encouraging example.
Synergism

*Knowing Sheila* contains some examples of cooperation amongst scientists and amateur naturalists. The focus of the book is Natusch herself, and while it does discuss her collaborations with publishers and other authors, it does not provide a comprehensive picture of teamwork within the sciences. It can’t be said to meet the CHAIRS checklist for synergism.

Conclusions

In the evaluation of my biography of Sheila Natusch, I have shown that it meets most but not all of the qualities of the CHAIRS checklist. The book places Natusch in the context of events taking place during her lifetime, but as she is not a scientist, it does not contain much about the history of science. It does portray its subject as a human being, one with both positive and negative characteristics, and gives a good picture of her life and relationships with other people. *Knowing Sheila* is written in a light, understandable style, which should engage the reader and encourage them to find out more through supplemental readings of Natusch’s own works. As a good exemplar to others, Natusch is shown to have overcome her early struggles with poverty and bullying to acquire an education in the sciences and humanities. She has contributed a great deal to the discipline of science communication in New Zealand by delighting and encouraging many children and adults through her writings and illustrations. Teamwork within the sciences is not addressed, as it is not within the purview of the book. As *Knowing Sheila* meets four of the six qualities of the checklist, it can be said to be suitable for communicating science, as long as it is balanced with other books that show the history of science in more detail as well as those which provide more examples of cooperation and teamwork.
Section Two—The Creative Component
Knowing Sheila:

The Life of Sheila Natusch

by

Susan Hamel
Introduction

In Wellington, on October 24th, 2012, I wake to the sound of slamming fish crates, as the workers at the Moana Pacific Fisheries ready the first deliveries of the day. It's 5:30 AM. I lie in bed worrying, and wondering, about Sheila Natusch. What will she be like? Will she answer my questions forthrightly, or hold her cards close to her chest? If she does talk, will it be interesting stuff, or just rambling?

I don't know the answers, and yet the successful completion of the creative component of my Master's thesis hinges on these questions. Sleep eludes me, so I get up and drink coffee until the sun rises. I rehearse conversation starters in my head. Prying seems rude, but it's called for here. How else am I going to, as my adviser succinctly puts it, “get the dirt”?

Time passes and I leave the city on Adelaide Road, heading south for Owhiro Bay. I give myself extra time, just as well, as part of the road is closed and I have to make a detour. I arrive just on 10 o'clock. The place has the muzzy familiarity of somewhere seen only on Google street view. Marine Parade hugs the coastline heading towards Island Bay in one direction and the Red Rocks Conservation area in the other. The Southern Ocean sweeps across the rocky shore, and a stiff breeze flails the tatty flags flying from various houses and baches. Didn't I read somewhere that Sheila has a tiny inflatable raft that she takes out into the bay, without a life jacket? It hardly looks safe, at least to my admittedly landlubberish eye. Above me, houses cling to the side of the hill. There is Sheila's, number 46, decidedly of a different era than some of its flasher neighbours. She appears, a tiny bird-like figure, and steps into something that looks like a big plastic bin running along a rail. This is her "cable car". It moves at a sedate pace carrying her down towards me. I smile and wave. She does the same and I feel encouraged.
At the bottom I see her properly for the first time. She is white-haired, a little stooped, but immaculately turned out in grey trousers, a matching blouse and jersey. Her head barely reaches my shoulder, and I feel like a slovenly giant in my faded jeans and black puffer jacket.

After introductions I step into the car and it bears us both back up, bypassing the steep and slippery steps. Sheila's husband Gilbert had been afflicted with both Parkinson's disease and dementia, and it was for him the cable car was built. Now it allows Sheila to remain in her home of sixty-one years, which she surely couldn't manage otherwise. I follow her along a heavily shaded path, with the house straight ahead. A cat greets us, named Bella, and Sheila tells me it is half wild, though it seems friendly enough. We go inside and back in time simultaneously. It is very dark along the passage. There are many things to step over and round. Books and papers and drawings in boxes, in shelves, in piles. There is no place in the kitchen where one could put down anything bigger than a tea cup. A coal range in an alcove takes pride of place along one wall, but we don't linger there. In the living room there is a window, and by the window there are two worn chairs facing one another, an arrangement that speaks of many comfortable chats. The sun sparkles on the water, and on the distant snow-topped peaks of the seaward and landward Kaikouras. I don't know their names, of course, but she does, and introduces them almost like friends.

Although I have never been anywhere quite like Sheila's house, with its lifetime of acquisitions and memories run wild, I feel at home there. We sit for a moment, then she hops up to make us some tea while I fuss with the recorder I will use for the interview. When she returns with the tea I ask her if she has ever thought of doing an autobiography. This concerns me because I don't want to tell a story that she could tell herself if she wanted
to. She shakes her head. Kim Hill, the host of the show “Saturday Morning” on New Zealand’s National Radio, has asked Sheila the same question but she says she doesn’t have time.

The relationship between biographer and a living subject depends very much on trust, so I begin by talking about myself. A lot. Why I am doing this course on science communication. What I have written in the past, including my six novels. She listens, and smiles and nods. Her hearing is flawless, and I am able to mentally check off another worry. Communication won't be a problem.

We warm to each other gradually. I stop talking and ask some general questions about her childhood on Stewart Island. Half an hour passes before I think to look at my watch. Sheila is a good storyteller, something I already knew from reading her books, but she doesn't disclose much about her feelings. Her father had a terrible temper and must have been a difficult person to live with, but she glosses over her discomfort, saying “that's just the way he was”. I can relate, and tell her so. My father was also afflicted with a bad temper from time to time. Sheila's father lived to be ninety-six. I wonder if age dulled his anger, as it did my father's, but I save the question for another day.

I ask her about the bullying she endured at school, which she wrote about in An Island Called Home. Again she deflects the question with “I got through it all right”. For all her friendly charm she will be a hard person to pin down, I can tell, and perhaps that is as it should be. Because making light of heavy burdens seems to be part of her personality. The thing that has seen her through the bullying, the difficulties with putting herself through school, and the illness and death of her husband Gilbert.
In all that first hour's talk she never once complains about anything.

I've struggled too, in my life, had plenty to complain about, and often still do. I wonder what this woman could teach me about acceptance, about making do, about letting go. Those aren't the questions I came to ask her, but perhaps I will find the answers anyway, in her long and accomplished life and the things she has written.

Although perhaps best known as a science communicator, Sheila has contributed to the New Zealand literary landscape in many ways. She has written thirty-seven books and collaborated on about a dozen others, in subjects ranging from popular science to history, biography, children's books and poetry. All are illustrated with her slyly informal pen and ink drawings and watercolours.

Her mother and grandmother were fine artists in their own right, and passed to Sheila that innate talent for “seeing” the world and translating that vision to canvas or paper. Her father gave her his knowledge of bird and beast, bush craft and bush bashing, as well as his fiercely independent nature. She would amalgamate and hone these legacies into a successful career as a freelance writer and illustrator, one that has seen her win a Hubert Church award for prose. In receiving this award, Sheila found herself in heady company—Frank Sargeson and Maurice Gee were previous winners; not to mention her dear friend Janet Frame, whose timely recognition saved her from a lobotomy at Seacliff. Later awardees would include Patricia Grace and Eleanor Catton. Her old school, Southland Girl’s High, named one its houses for her, an honour shared by few other New Zealanders. She was a good friend to Janet Frame, one of New Zealand’s leading literary lights, and was one of the first to read Janet’s unpublished manuscript of *Owls Do Cry*. Sheila also became a member of the
National Council of the Royal Society of New Zealand; though the records are sketchy, it seems likely that she was the only arts graduate ever to do so, until the Society was opened to humanities-related disciplines in 2009. She was also a regular columnist for the *Listener* magazine and a celebrated early outdoorswoman and mountaineer.

Sheila’s last accolade, becoming a member of the New Zealand Order of Merit in 2007 for services to writing and illustration, is certainly well-deserved. But her contributions to New Zealand society go even deeper than that. She has written much on conservation, especially on Stewart Island. In 2012, as a practical gesture to back up those words, she gifted an eighty-seven hectare bush section on Stewart Island to the people of New Zealand, covenanting it through the Queen Elizabeth II trust so that would remain untouched and unspoiled.

This is the woman that I want to share with the world.

But before we get started, some explanation is needed about the structure of *Knowing Sheila*. A “proper” biography begins with the childhood of the subject, doesn’t it? This book is going to be different. I’ve never written the story of someone’s life before, and the first problem I have come across is where to start. For help I visit the library, looking at various scientific biographies; Rosalind Franklin, Richard Feynman and others. Yes, they all begin at the beginning, tracing the precocious accomplishments of their subjects through childhood and schoolwork. The author, in each case, may as well not exist and yet their role is very important. They are the invisible arbiter of events. What is worth talking about? What is too insignificant or too controversial to mention?
We have only their judgment to ferry us through the whole life of a person. But, as I said, this book is different, because I hope to open up the process of writing a biography to the reader’s scrutiny. I will not be invisible or unbiased. To know Sheila Natusch you will also get to know me, the author. Perhaps you think this is an unwelcome intrusion on my part? Yet, how can you trust my judgment in the matter of the life of another human being if I give you no information about myself, or how I gathered the material I have redacted into this book or even why I wanted to write it?

In fact, the why is easy, and that is where we begin. The rest will follow along in its own time. Knowing Sheila, in fact, begins with a picture.

Feeling despondent, I sat in a chilly lecture theatre at the Centre for Science Communication at the University of Otago in Dunedin. Around me sat mostly younger students, eagerly chattering about plans for their theses. One was going to study elephants. Another bats. Everyone seemed sure of their path. Except me. A while ago I had come up with a plan to participate in a passenger cruise through the Drake Passage, that famously rough sea crossing that lies between the tip of Tierra del Fuego and the Antarctic Peninsula. I had decided to study whether shipboard education changed passenger’s attitudes; would make them willing ambassadors to the cause of Antarctic conservation. I thought I could document the results for a Master’s thesis, but my application for funding had been denied and I couldn’t afford to pay for the trip myself. That was two month’s work and a thousand dollar deposit down the tubes, leaving me with no other subject I wanted to pursue. So I wasn’t really paying attention in class that day, until the professor, Jean Fleming, mentioned that the Otago University Alumni Association was looking for someone to write a biography of an author,
Sheila Natusch. It might be possible, Dr Fleming continued, for that someone to make a thesis out of it, if they added some academic research.

I’d never heard of Sheila Natusch, and I had no idea whether she would make a good subject for a biography. I snuck out of the lecture as the professor moved on to other subjects, and headed for the toilet. Using my smart phone, I did a quick search on Google. No Wikipedia page, only a short biographical piece in the Oxford Companion to New Zealand Literature. Sheila had earned a Master’s at the University of Otago, had written and illustrated some books, and now lived in Wellington. That hardly seemed enough to go on. Remembering that my mother in law had been at the university during the same era, I rang her.

“Hello? Jill?”

My voice echoed a bit in the porcelain surrounds of the lavatory. I hoped she wouldn’t notice. “Did you ever know someone named Sheila Natusch when you were at Uni?” I had a quick look at the screen. “Her maiden name was… Traill?”

“Humph. Sheila Traill? Yes, I knew her.” Jill sounded gruff, but that’s nothing unusual. “From the botany lab. Bit flighty. Always sneaking off to draw pictures when she was supposed to be setting up experiments. What’s wrong with your phone? You sound funny.” I hastily said goodbye, and went back to my internet browser. Already Sheila had caught my interest. She seemed a bit of a rebel.
This time I did an image search. In *Tuatara: The Journal of the Biological Society* from 1987, I found a sketch, done by Sheila Natusch to illustrate an article she had written called “Two Gastropod Curios from Stewart Island”. I was entranced.

She had captured the fragility and beauty of the shell (*Lamellaria cerebroides*), in a sketch seemingly tossed off with just a few pencil strokes. Not a line wasted. The article was good too. The writing was chatty and informal but she still managed to communicate a lot of science.

I began to think I had found something to replace Antarctica.

My advisor, Lloyd Davis, was sceptical. I had already changed my mind several times about the subject of my thesis. Maybe he thought the subject was too broad and unscientific or that I would lose interest when I hit my first roadblock. In the end he gave me a grudging go ahead, with the admonition that this was to be my last change of heart. Or else. I left his office feeling more cheerful than I had for a long time, even though all I had was a name and a drawing from someone who I had just agreed to spend a year of my life researching. It felt like a promising beginning.

I have not looked back. Finding Sheila’s story has been a journey that has taken me from Stewart Island to Invercargill to Wellington and many places in between. I have made some new friends and learned much about life in rural and urban New Zealand during the 20th Century. Though I have flown through some parts and floundered in others, through it all I have been sustained by the inarguable rightness of my task—Sheila’s story is one that deserves to be told. Not because I will earn a degree out of it, but because her extraordinary
grit and dedication to Stewart Island, nature and New Zealand should be celebrated. To be held up as an example to young girls everywhere; that if you have enough pluck you can do what you want in this world, and leave behind a body of work to encourage others.

Why girls in particular? As a part of my research, I’ve discovered how women struggle with the clichés of science; the lack of encouragement, the oft-presented picture of a nerdy white guy in a lab coat, the difficulties of balancing career and family. There are plenty of role models out there for boys to admire, but how many pioneering women do we know of that have earned a place in the men’s club of science and science communication?

This quest to know Sheila also has a personal connection—the medium of science communication. With seemingly effortless ease Sheila is able to simplify the complexities of science with words and pictures that captivate young and old alike. In books like Native Rock of New Zealand or Animals of New Zealand the science is there at the forefront, presented with a light touch, full of personal anecdotes and informative-yet-lively illustrations. Her other books, on history, biography and even travel also contain quite a bit of scientific information, because it seems she is willing to visit almost any subject and gently imbue it with her own fascination with botany, biology and geology. This talent, to bring science to life in any sort of work, is rare and worth celebrating, but I want to know more. I too am a science communicator, and though I can never match Sheila Natusch’s output or her inimitable style, I feel there is much I can learn from her evolution as a writer. Within the pages of this book I hope to discover how she developed and managed her talent for writing and illustration, especially in the face of setbacks and personal tragedy. How did she fulfil her dream of going to university when her father insisted she stay home to care for her ailing grandmother? When Native Rock of New Zealand was rejected by her publisher, Pegasus
Books, how did she see that it got into print? How was it possible to continue writing during the prolonged illness and eventual death of her husband Gilbert?

Another question that deserves an answer—how has she managed to make a satisfying twilight career of writing and keeping her books in print? Sheila is eighty-nine years old. As life expectancies continue to climb, many of us may live that long or longer. Being able to carry our interests forward will be a boon to old age, providing both intellectual stimulation and a sense of accomplishment. I want to know how she does it.

The answers lie in knowing Sheila.
Chapter One—Home Port

I’m not a big fan of small planes. Yet here I was, sitting in the airport at Invercargill, waiting for a very small plane. One that would carry me to Stewart Island, home of the Traill family, where Sheila spent her childhood. Her ancestors are rooted in the landscape there, as much a part of the scenery as the endless bush or the Ruggedy mountain range. I knew I needed to visit Stewart Island to really understand Sheila Natusch, but getting there isn’t easy—especially for a lifelong sufferer of motion sickness like me. You have a choice of a passenger catamaran, which makes the Foveaux Strait crossing in roughly an hour, or a ten-seater Britten Norman Islander plane operated by Stewart Island Flights. The boat crossing could be rough, I’d heard this from Sheila as well as others, so I opted for the shorter journey by plane.

The airport was very nearly deserted on a blustery but fine Saturday morning in early June. I’d duly checked in, been weighed and now sat nervously with my husband, awaiting the call for the flight. There were four or five others, mostly tourists, like me. A young man came in the door from the tarmac and introduced himself as our pilot. He couldn’t have been more than twenty-two or twenty-three years old. But he had a cheery grin and seemed confident, so I followed him out to the plane, reassuring myself that he probably made this trip three or four times a day.

The cabin of the Islander is a bit like the inside of an old van, cramped and slightly smelly. There are five bench seats, accessed by two different doors. We buckled ourselves in and received a terse safety lecture. No need for oxygen or escape slides on this trip—the pilot merely waved a laminated card around for a moment then tucked it into the window frame.
Not that it mattered much. I knew very well if we ditched, it would most likely be into Foveaux Strait. Even with a life jacket the icy water would be lethal within minutes.

We began our taxi down the runway. As the engines wound up I felt my heart in my throat, but the plane left the ground quickly and gently, soon reaching its maximum altitude of 800 metres. The flight over the Strait was mostly smooth, with stunning views, so I soon lost my terror. We flew low enough to make myriad details of the landscape clear. I could see many smaller islands including Ulva, where Charles and Walter Traill, Sheila’s great uncles, ran Stewart Island’s first post office. I was impressed by the luxuriant dark green of the bush on the hills that skirt the coastline around Halfmoon Bay. That forest covered everything in sight. Stewart Island is a big place, and other than a few isolated farms it is wholly covered in native vegetation. I can’t say it is pristine, because the deer and rats have done their work, but the regular, orderly patchwork of fields and houses that you will see out an airplane window over most of New Zealand does not exist here.

A rainbow arched brightly over the tiny township of Oban, nestled in Halfmoon Bay with its flotilla of fishing boats. I took this as a good omen. A few minutes later we were on the ground.

It started to drizzle. “Just a sun shower,” a local reassured me. He couldn’t have been more wrong.

Sheila Ellen Traill was born in Invercargill on the 14th of February, 1926 to Dorothy and her husband Robert Henry “Roy” Traill. She was their eldest child. I wondered if Dorothy had to
make the rough crossing of Foveaux Strait while in labour, or did she sensibly travel to the hospital on the mainland well before her due date? There was (and is) no hospital on the island, just a couple of hardworking rural nurses who deal with a wide range of health issues for the 400-odd locals and many thousands of visitors each year. Anyone too ill is flown out these days, but in 1926 it would have been the weekly boat crossing—or nothing. Even now the nurses tell stories of having to keep seriously injured or ill patients stable overnight until the air transport can reach them in the morning.

Such privations have created a strong sense of smug independence amongst the locals, who are fond of calling the mainland “New Zealand,” at least in front of tourists. But within that autonomy there lies an unshakeable core of reliance and trust in each other. I found this out first hand when I wanted to get out to Ringaringa Beach to meet Sheila’s cousin Nancy Schofield. The day of the visit began with a fierce, squally thunderstorm, almost unheard of in June. My husband and I had planned to walk the few kilometres to Nancy’s house, but the sweeping sheets of rain were not encouraging. I went down to the lobby of the hotel, to inquire of the proprietor if she could arrange for a taxi.

She seemed to find this unaccountably funny.

It turns out there are no taxis on the Island. I was just resigning myself to a very cold and wet trudge when she offered me the use of the pub car. “Nothing flash, mind you,” she added. “But it will get you there and back. We won’t need it until tonight, so no hurry.” She pushed the keys across the desk at me, as though it was the most normal thing in the world to turn over your car to a person you had just met. She didn’t even ask to see my driver’s license. I thanked her profusely, and she seemed rather embarrassed.
Back at our room, keys in hand, I told my husband what had happened. He laughed at my amazement. “It’s not as though you could steal it. The locals will see we have the car and where we go with it.” Another advantage, or not, of living on an island. The permanent residents know a stranger on sight.

We found the car, an elderly diesel wagon, parked outside the back door of the pub. I tried to start it, but although it groaned and coughed repeatedly, it wouldn’t turn over. A man approached the driver’s side. “Give it some juice, love. Foot down, now turn the key.” Feeling like a complete idiot I did as he instructed. The engine roared into life. “Good on ya. I thought you could use a little help.” He wandered away again, heading towards the bar. I knew then that even if the word hadn’t gone out before that a loopy (a common epithet for tourist) had the pub car, it certainly would now.

We followed the narrow paved road that hugged the coast. In some places the embrace was a little too close for my taste, but the scenery, even with the sweeping showers, was stunning. Grey and white breakers bashed the shore. Wind whipped the trees back and forth, pelting the car with leaves and twigs. After a few moments there were no more houses, and I began to get a sense of the splendid isolation of this place, Rakiura, land of glowing skies. I imagine it would have a powerful appeal to some people. Me, not so much.

Our first stop that day was 7 Traill Street, the house where Sheila grew up. After a certain amount of thrashing around we found the number on a post, poking out of an overgrown hebe bush. The house itself was nowhere to be seen, only a faint track disappearing into the bush. Lugging my camera bag I plunged in, picking my way through various thorny shrubs and
trailing vines. For all the chaos, there was quite clearly the remains of a once lovingly tended garden here. Abruptly the bush opened out and I saw the house.
It is a wooden structure, once white, but now stained a greenish brown with mould and decades of dirt. Sheila had told me the house was unoccupied, but that didn’t prepare me for the state of neglect I found. The porch, at the side of the house, holds bags and boxes of junk, a deer horn, petrol tins, a rusted step ladder. Colourful plastic pegs still hang on the washing line. A hunting knife, probably belonging to Alex Traill, Sheila’s younger brother and the house’s last resident, rests on a tattered arm chair, now twined with bright nasturtium flowers. Two sleeping rooms, hardly bigger than closets, open on either side. An air of decay pervades everything, and it looks as though the house has lain untouched since Alex died in 2003.

The Traill house struck me as a profoundly melancholy place. I shuddered at the thought of Sheila and her brother sleeping winter and summer in those open and unheated bedrooms. The beds are still there, piled high with junk. There is a tattered dresser that might once have held Sheila’s clothes and her collections of rocks and shells. It explains a lot about the toughness of Sheila Natusch, and that was, after all, what I had come to find out.

I took some photos, tried the front door, which was locked, and then turned away. Elaine Hamilton, a friend of Sheila’s from the Rakiura Museum, had told me that one of the more distant Traill relatives now owned the house and planned to fix it up “one day.” I can only hope they will not wait too much longer. Elaine, with Sheila’s permission, had already been inside to collect the books and manuscripts, which she said were thick with dust and mould and damp. Some now reside inside the museum, others have been sold or thrown away. A piece of Stewart Island history is being eaten away by time and neglect, and there may not be much left to save before long.
Our next stop proved more cheerful. Nancy Schofield ushered us into her warm sitting room, which overlooks the wild and beautiful Ringaringa Cove, fed us tea and biscuits and answered many questions about her cousin. Nancy, who is 83 and white haired, still possesses lively blue eyes and a sharp memory. She remembers Roy Traill’s temper, which contrasted so vividly with her father Arthur’s more phlegmatic parenting style. Roy could make the “most uncomfortable camps” imaginable, but Sheila and Alex often went off into the bush with him for days at a time.

She showed me many old pictures of Sheila, but one stood out. A simple drawing, with a few pen strokes and a wash of brown hair and bright blue eyes, of the four-year-old Sheila holding a knitted duck. It was sketched by her grandmother, Emily, to commemorate the duck, which was soon to be burnt in case it harboured scarlet fever, an illness which almost claimed Sheila’s life as a child. It is a loving likeness, both simple and true to its subject. It is no wonder that Sheila was able to render those shells with the same easy grace.

![Figure 2 Painting of Sheila with her toy duck](image-url)
The storm outside had hardly abated when Nancy asked us if we would like to see the old homestead, where Roy was born. I was expecting something of a wreck, like Sheila’s childhood home, but this house, just up the hill from Nancy’s modern bungalow, has been somewhat better maintained. The back door was gone, just a couple of low boards in place “to keep the wekas from setting up housekeeping” Nancy said, with a laugh. Inside the house was glacially cold, but tidy. The fireplace held the urn containing the ashes of Nancy’s husband Murray, who died in 2011. His gumboots rested nearby, a mute testament to another Stewart Island outdoorsman. Though the damp had left much of the wallpaper sagging, the house felt almost lived in. When Nancy offered to put me up there, should I decide to return, I honestly couldn’t tell if she was joking or not.

The wind picked up again, with a cold and stinging rain. Nancy, undaunted, led the way down the hill towards the coast, intent on showing us the graves of Johann and Eliza Wohlers, Roy’s grandparents. The burial plot is magnificent in its loneliness, sheltered by massive Monterey Cypress trees and ringed by faded red palings. It looks across the Strait to Ruapuke, a dark smudge of an island, the adopted home of Johann Wohlers, who arrived there in 1844 from Germany. He married Eliza five years later, after finding the life on Ruapuke both lonely and hard without a mate. Johann was a Lutheran missionary, intent on saving the souls of the motley crew of ex-whalers and sealers who eked out a living as farmers and fisherman on Ruapuke as well as the local Māori. Eliza Palmer, who spoke fluent Te Reo, must have been a huge help to him. She was a widow, from Wellington, and presumably accustomed to a bit more comfort, but she brought considerable fortitude and domestic skill to the Wohlers’ household. She became a familiar figure throughout the coastal settlements, providing medicine and advice, and taking orphans and unwanted Māori children into her own home. Truly she was the answer to his prayers, as Wohlers had written in 1845
of his ideal wife, “She would need the courage of a Rebecca and the mind of a Martha, rather than a Mary, not only uplifted by Jesus’ discourse, but capable of hard work in His service, as His follower.”

Figure 3 The graves of Johann, Eliza, and Gretchen Wohlers

Nancy told me, as an aside, that without Eliza, Johann’s health and mission would both have failed miserably.

Their daughter Gretchen, born in 1853, soon shared in their charitable work, and also taught at the mission school her parents ran from 1870 to 1884. Johann died in 1885, and Eliza six years later, and both were buried in the tiny cemetery at Ringaringa. It is a fitting resting
place for such determined and altruistic souls, who spent their lives in the service of others with little reward.

I thanked Nancy for bringing me to this amazing place, in such inhospitable weather. I certainly wouldn’t have found it on my own. Typically, she didn’t think it anything out of the ordinary, and thanked us for visiting her. As I watched her trudge back up the hill, head down into the biting wind and rain, I could almost imagine Gretchen doing the same, perhaps carrying a basket of food for some needy family.

Perhaps that isn’t surprising, given Gretchen Wohlers is Nancy’s grandmother—and also Sheila’s.

By all accounts Gretchen was a free-spirited girl, who thought nothing of catching one of the half wild ponies that roamed Ruapuke and riding through the tussocks with no more than a plaited flax bridle. She was the only child of her parents, and one of only two European children on Ruapuke. Speaking fluent Te Reo, like her mother Eliza, she had many friends and playmates amongst the island Māori, who called her Kerēkini.

Later she was sent to Invercargill to attend Miss Pettingall’s School for Girls, which must have chafed a child used to the wild open spaces and freedom of Ruapuke. She returned there to help her parents as soon as she finished her education. A tiny woman, less than five feet tall, she nevertheless caught the eye of an apprentice seaman who had come out from the Orkney Islands on the sailing ship *Langstone*. Arthur William Traill had come to Stewart Island in 1878 with his brother Walter. Their older half-brother Charles had already settled on Ulva Island (in Paterson Inlet) and married a Danish-born woman, Henrietta. Charles ran a
shop and post office on the island, and was well-known for his interest in the natural world. Walter eventually went to live on Ulva with Charles, but Arthur, once he and Gretchen were married, settled at Ringaringa, in the house I had visited with Nancy Schofield. Arthur left the sea and became a school teacher and preacher at the Neck, the narrow peninsula that separates Paterson Inlet from Foveaux Strait. He is well known for leading a party that conquered Mount Anglem, the tallest peak on the island. Though the climb was difficult, through almost impenetrable stands of leatherwood scrub and supplejack, Arthur and his party prevailed. The tallest of the three peaks on Mt Anglem is named Traill peak in his honour.

He and Gretchen had eight children together—Etta, Fred, Arthur, Edwin, Charlie, Willie, Robert Henry (Roy) and Gordon. They were married for fifty years.

Sheila has many fond memories of her grandmother Gretchen, whom she has described in *Roy Traill of Stewart Island* as a “naïve wee soul, in speech and ways, but with very firm ideas of Right and Wrong. She was cheery and lively and enjoyed a joke, especially at her own expense throughout her busy and not always easy life.”

More of what I have come to think of as Stewart Island understatement. Certainly the idea of raising eight children in a damp and cramped house, with a husband whose health broke down from overwork, and the loss of her nineteen-year-old son Gordon to drowning could perhaps be characterized as hard, but no one would ever dream of saying so.

Roy, the second youngest child of Gretchen and Arthur, was born in 1892. His education in natural history began almost from birth. The island was a fine school, and his father, Arthur
Traill an excellent teacher. Roy and his friends played on the beach, making cricket balls out of kelp, or drawing hopscotch lines in the sand. They swam and took boats out into the harbour. This love of the outdoors never faded, throughout Roy Traill’s long life. Apart from a brief stint at the Union Bank in Invercargill, he never had an indoor occupation, working variously as an able seaman, prospector, fisherman, ranger and guide.

Roy enlisted for war service in 1915, and was sent to Egypt, where he was struck down by heatstroke. After recuperating in England he joined his company in France for the battle of the Somme. He and another soldier were pinned down by heavy bombardment, unable to escape. When one shell detonated almost on top of them, both men were buried in debris. Roy’s companion, who had been a good friend, was killed. Roy survived, but his left shoulder was shattered, and he suffered other grievous wounds along his left side. His wartime memories were grim, and he says of himself, “I wasn’t much of a soldier. I died every day at that war. And better men than me were killed every day.”

Roy swore that once he got away from soldiering he would return to Stewart Island “where it was cool”. He had his war pension, but supplemented it with fishing, gold prospecting and other odd jobs.

It was there he met Dorothea (Dorothy) Moffett, in 1923.

On reading about this piece of Sheila’s history I wondered how Roy and Dorothy ever ended up together. Certainly on the surface they had next to nothing in common. Dorothy was a sociable lass, fond of dance parties and tennis, and a dedicated churchgoer. She played the piano well, and was an excellent watercolourist. Roy, on the other hand, had no ear for music,
found the social whirl of city life intolerable and had absolutely no respect for religious observances. Still, after reading a selection of the chatty and tender letters she wrote, I can only conclude that Dorothy was very fond of Roy, and keen to begin a life with him, even after he accused her, on occasion, of excessive “frivolity”.

I spent some time at the Rakiura Museum, poring over Roy’s letters and journals, but found nothing written to Dorothy. Perhaps they lay in the wealth of materials yet to be digitised that Jo Riksem, the curator, told me about as we worked in the tiny upstairs storage area. Half-jokingly, I said that I would be happy to spend a month on Stewart Island completing that project if they had the money to pay me.

“We are all volunteers here,” she replied, quite tartly. “And we work very hard.”

Good one, Susan. Way to impress the locals.

Roy’s life had not been easy, certainly, but Dorothy endured her own hardships. She was born in Bay City, Michigan to Emily and Arthur Moseley in 1892. Of her father little is known. He was English, as was Emily, and the reason for their visit to Michigan has been lost in the mists of time. But for Emily, that trip abroad must have felt like an unmitigated disaster. Both her husband and young son Arthur, born after Dorothy, died there, though together or separately and by what cause is unknown.

After those twin tragedies, Emily and Dorothy moved to Australia, to live with Emily’s sister Caroline Miller, also a widow. During her stay there, Dorothy contracted a serious illness, perhaps rheumatic fever, and was bedridden for two years. Emily may have suggested a
painting trip as a way to improve her daughter’s health. She was an accomplished artist, having studied with John Everett Millais, a renowned pre-Raphaelite painter. They traveled to southern New Zealand to stay at a holiday cottage belonging to Nellie Snow, an aunt. Dorothy fell in love with the wild beauty of the countryside, and her mother found love of a different sort, with Tom Moffett, a banker from Invercargill. They married, and Tom became Dorothy’s adored stepfather.

On another painting excursion, this time to Stewart Island, Dorothy met Roy, and quickly became “his girl”. They married in October, 1924.

*Figure 4 Roy and Dorothea Traill (date unknown)*

Roy became the ranger and caretaker of the island in 1924 and held the position until 1959, employed jointly by the Department of Lands and Survey, the Forest Service and Internal Affairs. The job was only part time, but Roy spent many more unpaid hours cutting tracks, some of which are still used today. He made it a lifelong goal to eradicate deer on Bravo Island, though as soon as he killed the last more would swim over. Protecting the native bird
population from animal (and especially human predation) was another task he took very seriously. Someone once asked him what he would do if someone allowed possums to get to Ulva Island. He replied, “First I would shoot the person who brought the possums. Then I would shoot the possums.”

He was made a member of the Most Excellent Order of the British Empire in 1963 for his services to Stewart Island. I don’t think he ever had to shoot anyone, but possums are still a problem.

After his retirement Roy became an honorary ranger and local “identity” who lived all but the last few years of his life on Stewart Island, in the house at 7 Traill Street. His son Alex, who never married, lived with him.

Sheila has written extensively about events surrounding her father’s legendary temper. Part of it, no doubt, was caused by his war wounds, but other relatives have pointed out that he was prone to tantrums even as a child. He seemed to be a perfectionist when it came to the efforts of others; when tea or fish or potatoes were not cooked to his satisfaction he was likely to “blow us all up” as Sheila put it. But Roy was well thought of by the various naturalists and scientists that visited, whom he used to guide to places around the island. He saved his best behaviour for guests, but thought nothing of coming home unexpectedly with three or four people and expecting his longsuffering wife to give them a meal. He must have been a difficult man to live with, especially for someone like Dorothy who was too polite to defend herself, even in the face of public putdowns. Sheila has written that her mother “wouldn’t have minded, as the years went by, replacing the old coal range with one of the newer
models. Many of her contemporaries had done just that. But the stove went, as my father reasoned: what the deuce was to be gained by chucking it out?"

Perhaps the free communication of his moods contributed to Roy’s long life. He outlived his wife by thirty years. Sheila tacitly blames him for her mother’s early death from cancer at age sixty-six. Living with his volatility “wore her out”, though she adds that Dorothy loved Roy and Stewart Island and wouldn’t have traded either for the social rounds of Invercargill. I wonder about that.

I get the impression from my talks with Sheila that she never really forgave her father for his tempestuous outbursts. She writes that “impulse ruled the household, plus the clutter of Things That Might Come In Handy.” After seeing the house at 7 Traill Street I can well believe that could be true. But perhaps writing about his faults has allowed her some measure of understanding, if not forgiveness?

I grew up with a father who could also be tempestuous at times, and I well remember the feeling of walking on egg shells, of never knowing what would set him off. Sometimes it seemed to be nothing at all, or at least nothing that was talked about. As he aged we eventually settled our differences. Perhaps he grew more mellow, perhaps I just got better at standing up for myself. But Nancy Schofield told me that Sheila never really made that transition, and although she was very stalwart and forceful in other areas of her life, she always deferred to her father, perhaps fearing, still, that unpredictable wrath.

Sheila spent the first eleven years of her life on Stewart Island. She writes fondly of her childhood:
It is hard to grow up on Stewart Island without some awareness of the natural world. Native birds are more obvious to eye and ear than introduced; beaches are lined with interesting shells and seaweeds washed ashore; all is there to be experienced at full strength. The sea itself was intensely real to us as children: we learned to swim in it, and fossick for shellfish and scull and pull the dinghies.

Although the island might have been a paradise to an adventuresome girl with an interest in nature, school could be a trial. Both Sheila and her brother Alex were bullied relentlessly. Sheila was a small girl with a prominent nose, which might explain the nickname given her by the other children—Kaka Beak. She was hauled off her feet by her eye sockets, beaten bloody on the way home from school and threatened with worse if she told. Some of this could be the usual garden-variety cruelty that children visit upon one another, but it was also exacerbated due to her father’s position as ranger. It was he who stopped the less conservation-minded locals from hunting protected birds, and that would not have made him, or his children, popular. Sheila kept the abuse to herself, though it seems incredible to me that her parents or teacher never noticed or intervened on her behalf. Perhaps there was a certain acceptance of bullying back then—it was part of growing up. People in charge turned a blind eye; hadn’t they endured worse in their day, after all?

Sheila’s schooldays were not without some happy memories however. She writes of one teacher, Mr Calder, who was quick with the strap for swearing or talking out of turn in class. “Pretty rough stuff it may seem nowadays, but it worked well enough at the time. Old Bull is remembered with affection, not shudders.” Interesting, I suppose, that violence by teachers was also condoned, and even appreciated by the students. Sheila seems quite fond of Old Bull. She tells a story in An Island Called Home about a time Mr Calder, who owned a large
dinghy, was mapping the Inlet rocks “the hard way”. The boat sank, dumping him and several other passengers into the water. Sheila observed the scene from her father’s boat, and later sketched it for her classmates on the board at school, during a wet lunch hour. She was so involved with her rendition she did not see her teacher enter the classroom. Fortunately, he was amused rather than annoyed by her efforts, and seemed almost sorry to wipe the board down to begin the lessons afterwards.

Her artistic talent developed early and she remembers watching both her mother and Granny (Emily Moffett) sketch and paint with watercolours. She says she learned that blue and red made purple at about the same time she was learning to read. As Sheila walked home from school, Emily could often be seen perched on a three-legged stool above the beach, applying washes of colour with a sure hand, delighting “in the evanescent moment – the play of light on water, or mist softening the shapes of the bush.”

Sheila describes this talent much better than I could. I’m no artist, but having seen works by both Emily and Dorothy I would agree that they both had the ability to render landscapes simply and beautifully. Not that art didn’t have its challenges. Roy often impulsively moved the boat or broke up camp before Dorothy had a chance to finish her pictures and she developed faster techniques as a result, often just quick sketches with a touch of colour. Again I will leave it to Sheila to describe her style—“Draughtsmanship and texture were her strengths. Her best work brings out the taste and feel and scent of particular remembered days.”

Outside school and art lessons with her mother and Granny, there was the wonderful world of the Island to explore. Sheila and Alex went on many trips with Roy, blazing trails, deer
hunting, or visiting one of the many camps he had set up. There were trips to Mason’s Bay, over the summer holidays, to visit Arthur and Mateen Traill’s (Nancy Schofield’s parents) sheep station. A cottage which had been moved from the old whaling station on Bravo Island made another holiday base, handy for deer stalking. Sheila has written, “We went there year in and year out for our holidays, rebellious thoughts of independent expeditions being very poorly received.”

Sheila and Alex both spent time helping their father with his various duties as ranger and with fishing. She includes an essay in An Island Called Home, originally published in New Zealand Outdoor magazine, called “Afloat With Dad”, that gives the reader a taste of his uncompromising nature:

   Easy! Easy! EASY! (curse the girl). Can’t you see the net’s fouled!” All this while I “eased” as hard as I could. “No, no, NO, don’t stop the (past participle used adjectively) dinghy. All right then. Do what you want to. I only wanted you to bring her into the wind. No, the other way…

   

The description goes on, for several more paragraphs. Sheila softens his haranguing with humour, and spends most of the article talking about the various types of fish they hauled up and the appearance of seals on the shoreline. It seems awfully hard for a young girl to be treated this way, at least to me. But Sheila seems to have been strengthened by this experience, as steel is tempered by hammering. Even though she has told me she did not confide in anyone, choosing instead to tell her miseries to the family cat, the closeness of life on Stewart Island meant that she would have been well supported. An invisible network of threads, the same one that would know loopy from local, created a layer of sympathy and
understanding that might have been invisible to a child, but would nevertheless have been as present as the shrieking sea birds on Ringaringa beach.

Sheila was indeed lucky to have “An Island Called Home”. It provided the solid grounding that familiar and well-loved places can give a child. Hidey holes, secret fern glades, and private cliff top views belong to the child who has lived in a place all her life, who knows it like the back of her hand. No matter where Sheila went after she left the island, her old life went with her, and sweetened every new vista of beach or forest with memories of times past.

These memories also a play a part in Sheila’s successful career as a science communicator. They imbue her writing with immediacy and joy; provide practical experience to counter the sometimes ethereal world of science. Would Sheila have been a good writer if she hadn’t grown up on Stewart Island? Undoubtedly. Her talent is far broader than that. But I still needed to understand that impetus that put her on the path to becoming a science writer. Living on Stewart Island certainly played a part. But who were her role models? I combed Sheila’s books for others who had influenced her. And there, in books like Roy Traill of Stewart Island and An Island Called Home, I found the answer. Stewart Island was a haven of untouched bush that beckoned to some of the best scientists in New Zealand and around the world. In the next chapter we will meet some of them and see what effect they had on young Sheila.
Chapter Two—Desperately Seeking Science

Once I’d convinced my supervisor that doing a biography of Sheila Natusch could work as a component of my Master’s Thesis, I still had to come up with a structure for the book. A standard biographical treatment wouldn’t work, for a number of reasons. Firstly and mainly, I am not a biographer by trade. I write stories, and until I began my degree, none of them were in the least bit truthful. A biography, with its cut and dried recitation of facts, didn’t appeal to me. Beyond that, I felt that Sheila deserved more than a sterile approach to her life story. She is alive and vibrant, a shining example of what it means to age gracefully and meaningfully. How could I portray that without getting personal, without writing about her house, our conversations, and our shared experiences?

Simply put, I didn’t think I could. And I wanted to, because I owed it to Sheila, for her friendship and understanding, and to Alison Finigan, who was instrumental in setting me on this path. It was she, in her role as Head of Alumni Relations, who suggested that someone might write a book on Sheila. When I met her, on a sunny afternoon at her office in Alumni House, I hadn’t yet decided whether I would accept that challenge. I worried that Alison would think I was unsuitable. After all, I’m not a proven science writer or even a native New Zealander. Alison is a beautiful woman with an engaging smile, and she is passionate about the University of Otago and its graduates. Her enthusiasm is contagious. She welcomed me warmly, showed me charming letters she had received from Sheila, and told me about meeting her in Wellington. All these things helped me make up my mind to go ahead, but the clincher was how Alison talked about Sheila’s work. She said that in primary school Sheila’s stories and illustrations had made science come alive for her, given it interest and meaning beyond anything she had learned in a classroom.
That brought me right back to the reason I came to the University of Otago.

I vacillated a long time before I decided to sign up for this degree in science communication. I knew I could create worlds using my imagination. I’d written almost a million words of fiction and I thought the last 300,000 or so were pretty good. But I was troubled by the knowledge that fiction, or at least the kind that I was writing, wasn’t going to change the world. And there are a lot of challenges facing humanity in the twenty-first century. Climate change, over-population, consumerism, peak oil, pollution—the list goes on. All of these challenges demand people who can sift through facts and fallacy, understand the uses and abuses of scientific testimony, make up their minds based on simple truths rather than persuasion. People who can see through the faux news and political spin. It requires knowledge, engagement, and trust in the scientific process. That is what I wanted to be able to give the world, and fiction wasn’t going to get me there.

Now here was someone, Sheila Natusch, who had been successfully communicating science for fifty years or more. Those pictures of the shells I found exemplified her talent for making the complex simple, approachable, even fun. And she had done it her way, straightforwardly; uncompromisingly. If a publisher didn’t like her work she took it somewhere else, or published it herself, well before such things were made simple by the Internet. And over the course of those many years Alison Finigan and hundreds of other school children had been caught and charmed by Sheila’s words and pictures.

So in the end, I agreed to write this book. Alison hugged me impulsively as I left, and arranged my first meeting with Sheila. I left feeling confident. My supervisor was on board and now I had only to present my thesis to my classmates and the other instructors. I worked
feverishly on a PowerPoint presentation. I hate PowerPoint. You either fill the slides with words and then read them out to your audience, or talk while their attention is distracted by the pictures splashed on a screen behind you. Nevertheless, I put something together and ran through it a few times with my patient family. The day of the presentations found me nervously awaiting my turn, hoping my five minutes and time for questions would pass quickly without any major stuff ups. And it seemed to. I talked about Sheila, her accomplishments, my plan for the book. There were a few easy questions.

Then a questioning voice from the back, belonging to one of the other instructors. “But where is the science in that? You’re supposed to be doing a science communication degree.”

_Not a biography_, she might as well have added.

I stumbled over my response. She didn’t seem convinced. I left the stage wondering if I had chosen the wrong topic, or the wrong degree or even the wrong University. It was a huge let down.

But I’ve had a lot of time to think about my rationale since then. This chapter represents the full answer to that uncomfortable question—where is the science? To that I add a question of my own—how did growing up on wild and sparsely populated Stewart Island give Sheila Natusch the background she needed to become a successful writer and illustrator of science books?

The answer begins with Stewart Island itself, one of the greatest living laboratories on Earth. It provided the raw materials for Sheila’s childhood explorations—every shell she fossicked
for on the beach, every orchid she identified with the help of her family, every creepy crawly she packed in a rusted tobacco tin to study in her room.

Kathy Ombler, in *National Parks and Other Wild Places in New Zealand* describes Stewart Island as “perhaps one of the largest unspoilt forested islands in the world. …a treasure chest of unmodified ecosystems and habitats and a haven for rare plants and endangered wildlife.” Why should it be so? First of all, Stewart Island’s location south of the main land masses of New Zealand, in a very rough stretch of water known as the “roaring forties”, made it less attractive to settlers. Though the island covers nearly 2000 square kilometres, the population stands at only 400 full time residents.

The second reason for Stewart Island’s success as a natural sanctuary has to do with the lack of *mustelids*, such as stoats and weasels. These predators were introduced to the mainland to assist in controlling rabbits (another ill-advised introduction) but did not come to Stewart Island. Although there are other predators, such as cats and possums, birds such as the kiwi are able to flourish on Stewart Island. This kiwi population (southern tokoeka) behaves differently than kiwi found in other parts of the country, including forming family groups and feeding during daylight hours. Your chances of spotting a kiwi in the wild are much greater on Stewart Island than anywhere on the mainland. Nancy Schofield told me that she has almost tripped over foraging kiwis in the evening as she walked about her garden.

I, however, did not see one. In fact, little of the island’s vaunted bird life made itself available for viewing while I was there, which could have been due to the weather or the season or just bad luck, depending on who I asked.
I suppose that tramping on Stewart Island would have been a good way to research this book, and I may, someday, if I get over my aversion to mud. The DOC website for the Northern Circuit track shows a picture of a cheerful looking fellow standing knee deep in the stuff. My partner assures me that this is not uncommon, although rainfall in Stewart Island averages only 1,600 mm a year. That’s less than Auckland. But the density of the bush means that the sun, when it shines, doesn’t have a chance to dry things out.

The Northern circuit takes about nine days to complete and once you leave Oban there is nowhere to replenish your supplies until you return there. DOC provides huts and campsites, but if you run out of food, you may be forced to eat limpets, as an acquaintance of mine did when her food supplies ran short on the seventh day of her tramp. Sheila would have been proud of her, having eaten many such improvised bush feasts while she was growing up. She even wrote a book about it—*Wild Fare for Wilderness Foragers.* A handbook for the determined hunter-gatherer in New Zealand, it reads more like a book on how to *starve* in the wilderness, at least as far as I am concerned. Sheila includes many cheery childhood tales of clambering about trees and rocks and shore, plucking and eating many, to my mind at least, unsavoury items. Huhu grubs? Limpets? Fruits of the bullabulla shrub? The book, to its credit, also contains a great deal of scientific information and warnings about what not to eat while benighted. It is illustrated throughout with the pen and ink drawings. As a comfortable chairside read it is very worthwhile, but I hope I am never in a position to take up any of the advice and recipes for roasted possum or seaweed pudding.

Still, many people both from New Zealand and overseas tackle the tramps on Stewart Island every year, drawn by the birdlife, flora and sheer wildness of the place. Roy Traill would have introduced young Sheila and Alex to tramping from an early age. He cut many tracks
through the bush, set up camps, often leaving behind a haunch of venison hung high in a tree for the next visit or visitor. Sheila often felt sorry for the deer her father dispatched until it was time to eat a tasty feed of venison cooked over an open fire.

Roy was inarguably a naturalist, of the kind rarely found these days—a person whose encyclopaedic knowledge is borne of curiosity and experience, rather than through books or University lectures. Roy learned from his father, Arthur, and in turn passed down his knowledge to Sheila. She was far more interested in such esoteric things than her friends. Nancy Schofield says of Sheila, “As a child, Sheila talked a lot to older people, adults, while the rest of us played, and now we’re all so grateful for all the family history she has accumulated.”

That family history has been outlined in *The Natural World of the Traills* which Sheila published in 1996. Her Traill kin’s fascination with nature begins well before they reached Stewart Island. William Trail of Westness and Woodwick (estates in the Orkney Isles) could be considered the patriarch, as he fathered sixteen children in two marriages. An educated man, his home included a museum, library and botanical garden. Several of his children went on to become naturalists and travellers. Arthur William Traill, whom we have already met, was a son of William’s second marriage to Henrietta Heddle. Charles Traill of Ulva was a son of the first, to Harriet Sarle. There are many living things whose nomenclature reflects the knowledge and dedication to natural history of Sheila’s forebears including the native shrubs *Olearia trailii* and *Cuspidaria traillii*, both named for Charles Traill.

So Sheila, the descendant of naturalists, was also steeped in natural history practically from birth, as most children on Stewart Island would have been. But they don’t all grow up with
such a fierce determination to understand the similarities between the flowers on the potato plants in her garden with those of the bullabulla shrub. In the case of bullabulla (also called poroporo by the Māori) every child would be taught early on to avoid its fruit, for though it looks enticing it is extremely poisonous, at least when green. But the potato tuber, sharing the same family name—*Solanum*—was not. Sheila was asking curly botanical questions of the adults in her life well before she started school, and developing an understanding of flowering plant families. Was it just her family background coming to the fore?

Or did it have something to do with the stream of visiting botanists, geologists, ornithologists, naturalists, photographers and writers who sought out Roy Traill’s expert advice and guidance while they were partaking in the scientific riches of Stewart Island?

Reading Sheila and Roy’s reminiscences of those times almost represents a Who’s Who of New Zealand science. Sheila wrote, in *A Bunch of Wild Orchids*, of her meeting on Mount Anglem of an un-named Dunedin botanist (perhaps William Martin?). They were both on hands and knees admiring the vegetable sheep, when in the course of conversation Sheila mentioned that she had an orchid garden down at her house. He was keen to see it, and with appropriate directions—“there is a *Gastrodia* at the gate”, set off at once. She had accumulated quite a collection of orchids, encouraging those that grew naturally on the damp banks around the house, and transplanting others from around the island, and even from Ulva. They flowered mostly in the summer, and she remarks that the Lady’s Slipper orchid was much in demand for February weddings and many girls timed their nuptials to coincide with the blooming.

Her interest in orchids began as a young girl, when with her cousins she used to make the trip to her Uncle’s sheep farm at Mason’s Bay, by the head of Paterson’s Inlet. After a boat ride
up a “winding, treacle coloured river” they would walk nine or ten miles across the inland flats to reach the station. Away from the clamour of the coast the air was still, full of the peaty smells of the damp ground, as well as daisies, flax and native mint. Although it would have been a long walk for a child, Sheila, characteristically, does not complain. Rather she describes the “miles and miles” of blue or occasionally clover pink thelymitras, wide open to the sun and in full flower. “The way never seemed long,” she recalls.

I wonder whether it was so pleasant in the rain. Like the supposedly plentiful birdlife, the orchids were not in evidence when I visited Stewart Island but I think we can blame the season for that. I will perhaps return some summer to see if Lady’s Slipper is still abundant enough to supply the bouquets of romantic Stewart Island girls.
Charles Wright, a soil scientist and ecologist, arrived in New Zealand in 1936 from Leeds. While working on a boat dredging for oysters in Foveaux Strait Wright met Noeline Baker, owner of Moturau Moana, the closest the Island ever got to a “stately home”. While working for Miss Baker, Wright was taken out to Mason’s Bay by Roy, whom he refers to in his memoirs as “my one-armed friend the forest ranger”. They also hunted muttonbirds together. Charles Wright has said that his visit to Stewart Island was instrumental in his understanding of ecology and the role of plants in improving soil quality.

Lance Richdale, the eminent ornithologist, often depended on Roy to ferry him over to the various islets in Foveaux Strait to study sea-birds. He became a good friend of the family and later when Sheila moved to Dunedin to attend the University of Otago, Dr Richdale and his wife Agnes helped ease her homesickness and provided her with academic advice.

When I first visited Sheila, in 2012, she told me another collecting story, which she has also written about in An Island Called Home. She had been out with William Martin, a retired schoolmaster and self-taught botanist from Dunedin, as well as Roy, her brother and a couple of other collectors. They were hunting, amongst other prizes, Blindia immersa, which grew in waterfalls and creeks around Table Hill, close to Port Pegasus. Martin had given her detailed instructions as to what to look for, but perhaps didn’t think that she would succeed in finding the elusive moss. In the evening, while brushing her teeth in the creek that flows behind the Table Hill hut, she caught sight of “streaming, fanning tresses of mossy growth anchored in the creek and trailing from the cold, rocky basement of that crystalline, upland water”. It was Blindia, and later when she pointed it out to Martin, his reaction must have been disappointing, because she adds “I was immediately sorry I hadn’t left the collector to find it for himself”.

One might have hoped that the botanist’s exasperation at being pipped would not have been communicated quite so strongly to a helper who was only doing what had been asked of her. But this was perhaps symptomatic of an age when female contributions to the sciences were few and considered suspect. Sheila speaks of her neighbour Dolly Leask, who collected and pressed orchids, noticing differences that “were no less valid for her diffidence over the tongue-twisting scientific nomenclature”.

Between high school and university, Sheila hunted bush snails for Wellington entomologist Albert Creagh O’Connor. She packed them, lovingly surrounded by moss, into empty chocolate boxes and was often rewarded with a full box of chocolates in return. O’Connor, a collector of beetles and snails, is perhaps best known for describing the giant land snail, *Powelliphanta*, in 1945.

Sheila’s father, Roy, was no believer in higher education for women, in science or anything else. He told her that there was no point in educating girls as ‘they just get married and it’s all a waste of time and money’. Nevertheless, Sheila remained determined to educate herself in natural history. She spent a great deal of time sketching and studying sea birds and plant life on the island. As well as the snails for A. C. O’Connor, she collected many insects, plant specimens, and the occasional fallen bird’s egg. And there were some bright female visitors who undoubtedly provided an antidote to Roy’s old-fashioned chauvinism. Dr Averil Lysaght, an entomologist from Victoria University in Wellington also visited the Traills. She stayed at the hut that had once belonged to Arthur Traill in the Rakehua Valley. Sheila has said that as children they often went there to camp, and saw many parties of naturalists coming and going through the tall red tussock. She recalls helping Dr Lysaght look for
creeping foxglove along the riverbanks. Also on that expedition were two well-known lady authors, Edith Howes and H.K. Dalrymple. More role-models for young Sheila?

Other well-known visitors included the “two Lucys”. Lucy Cranwell, renowned for her palynology research (the study of fine particles including ancient pollen, spores and insect parts from soil cores) was given the job of botany curator at the Auckland Museum at age twenty-one. She was one of the first woman scientists in New Zealand to undertake extensive fieldwork, often with her scientific companion Lucy Moore. Roy helped her find plants for her collection and she visited the Traill household on several occasions.

Closer to home, and a frequent guest and expedition partner, was Noeline Baker, the owner of Moturau Moana. Miss Baker, born in Christchurch, moved to the United Kingdom as a child and attended the Slade School of Fine Art. Never married, she was an early suffragette, and was appointed honorary secretary and treasurer of a Surrey women's farm labour committee in May 1916. As part of this role she organised training and found work for women on farms during the Great War. She was given an MBE in 1920 for her work. After her parents died, Noeline Baker returned to New Zealand and eventually settled on Stewart Island, where she built Moturau Moana. The Dutch colonial style house was surrounded by hectares of garden. Such was Noeline’s interest in local botany that she determined to grow all the plants listed by the botanist Leonard Cockayne as indigenous to Stewart Island. Roy helped find many of the specimens for the garden, and later became its unofficial caretaker.

Sadly, the house at Moturau Moana burned down in 1967 after Miss Baker had donated it to the New Zealand government as place of study for botanists. The remaining gardens serve as a legacy of Noeline Baker and her love of Stewart Island flora. I visited there when I went to
Stewart Island in 2012. Nothing remains of the house, and though there is still a sense of the garden being divided up into ‘rooms’ there seems to be little left of the vaunted plant collection that won Miss Baker the Loder Cup in 1949. This national award for conservation described the recipient as “an ardent student of Stewart Island botany, and through her collection and personal enthusiasm…stimulated many others”.

There is no doubt she would have had a powerful influence on Sheila.

Sexism is rife in the sciences, even today. In Sheila’s childhood, she was fortunate to have some female role models to encourage her interest in natural history as well as a magnificent living laboratory in which to explore and collect. And though her father did not approve of her thirst for learning, he did later describe her as a “damned clever woman”. Hearing this compliment from Roy just before he died must have been a bittersweet experience to someone who had struggled to achieve an education without his help and support.

In my travels to Stewart Island I found it to be the perfect place for a curious youngster to grow up, with abundant natural history and plenty of knowledgeable locals to answer questions and supervise trips to the hinterlands. Her childhood experiences, as well as the many scientists and naturalists she kept company with, had a powerful effect on her. Here were men and women who loved learning, loved science, and were willing to undergo discomfort in all sorts of Stewart Island weather to add to that body of knowledge. But Sheila’s brother Alex grew up with those things too, and he became a fisherman, not a celebrated science writer. What made Sheila different?
Perhaps the answer lies in her secondary education in Invercargill, so to find out more I head across Foveaux Strait to Southland Girl’s High School.
Chapter Three—Setting Sail

I drove into Invercargill one rainy Tuesday afternoon, armed only with a couple of emails and contact names. My itinerary included the Southland Museum, Southland Girl’s High School and the Invercargill City library, all places I hoped would provide me with clues about Sheila’s long ago childhood. I found my hotel, very basic but clean, and parked in the cramped basement garage. Fortunately everything, with the exception of Sheila’s old school, was within walking distance.

Someone once described Invercargill to me as the “armpit of New Zealand” so my expectations were low. But I was pleasantly surprised, for the most part. Invercargill is built on coastal flatlands, so the town has a spacious feel to it. The streets are wide, like Parisian boulevards. No doubt the early town planners had that in mind when they laid out the town, but they may not have been aware of the howling southerlies. The broad streets gather and funnel them into pocket gales. Still there are plenty of pedestrians about as I wander the downtown, searching for coffee. I find the ubiquitous Starbucks, and wonder if there is any decent sized town in New Zealand, or the rest of the world, that doesn’t have at least one. I grab a takeaway Americano and stroll along to the library.

I don’t know if the library is another triumph for Invercargill’s industrious mayor, Tim Shadbolt, but it is certainly well equipped and well staffed. I am seated in a room with boxes of material they have gathered on the Traill family, thwarted only by the instruction that I am not allowed to copy or photograph anything. I soon strike gold. There is lots of material here, including a copy of her mother Dorothy’s long lost father’s death certificate. I’m able to find his grave, via the magic of the Internet, in Bay City, Michigan. The record says he died of pneumonia, but no other details. And there is nothing at all about the death of little Arthur,
who would have been about two years old. Later, I will send the record to Sheila, who seems not that impressed with my efforts. I suppose that Emily’s second husband Tom Moffett felt like her real grandfather, since he was the one who adopted Dorothy, and raised her as his own.

Sheila spent four years going back and forth from Stewart Island to Invercargill, where she was a student at Southland Girls High School. Her cousin Marjorie also attended Southland Girls, and the two often travelled together on the ferry. Marjorie was a couple of years older, which must have been somewhat comforting for Sheila, who had spent almost all her life in the cosy confines of an island. Invercargill, with its buses and traffic and spreading neighbourhoods, probably felt like the Big Smoke.

The cousins made the three to three-and-a-half-hour crossing on the Tamatea, a wooden flat-bottomed ship with a high funnel. Tamatea had a chequered career, first built as a steamship in Australia, and later used as a fishing vessel and freezer before being acquired by Captain Robert Hamilton of Bluff. He became the skipper of the twice or thrice weekly run between Bluff and Leask’s Bay, and was known to venture forth in the filthiest weather. One journey from Bluff to the Island, where all the passengers were confined below decks due to rough seas on the Strait, seemed endless. When the ferry finally docked, Sheila, who was headed home for the holidays, staggered on to the deck. But she was not greeted by the deep green hills of Halfmoon Bay. Captain Hamilton, having had second thoughts about the weather, turned around mid-journey and brought them back to Bluff. I can well imagine her disappointment. Sheila notes ruefully that it took her several years to get her sea legs on that long, frequently rolling crossing, although she was very used to being on the water in smaller boats. Marjorie however, was never seasick.
I find a picture of the Tamatea, with Captain Hamilton at the wheel, in a book called Stewart Island Boats. She was smaller than I expected, and I can understand the Islander’s disappointment to be presented with this new “ferry” that probably stank to high heaven of old fish. They had hoped for something bigger and more user-friendly, but there was no money for another boat. The Tamatea had to serve. And serve she did, carrying passengers, mail and freight from 1930 to 1942, when she was requisitioned for service in the Pacific during the war.

Sheila drew a charming illustration for the Southland Girls Centennial book of herself and Marjorie on the deck of Tamatea, sitting on a coil of heavy rope. They are wearing their school uniforms and hats, bending over a crossword puzzle. “Three hours was a long time,” recalls Sheila. “Three hours was the time it took to sit a big exam, or have all one’s molars out.” She and Marjorie had time to let their imaginative minds run riot, especially during the war, when any ripple or swiftly diving shag could be mistaken for a U-boat periscope, no doubt accompanied by shrieks and finger-pointing.

From an early essay by Sheila, we learn of her first days at Southland Girls. In careful, beautifully slanted cursive she relates:

I was very glad when I left the primary school last year and looked forward to going to High School very much. On the first day, when I arrived at the school gates, I couldn’t see anyone I knew and there seemed to be millions of strange girls. I wandered up and down until the bell rang and then I suddenly found that school wasn’t so bad, after all. When lunchtime came I was still rather nervous, and everyone seemed to be staring at me, so I decided to go home for lunch the next day.
Sheila’s account of her first day reminds me of that feeling of loneliness I experienced each time I stood on the playground of a new school. My father’s position as a Warrant Officer in the US Army meant we moved frequently. Once I attended four different schools in one year. I learned to play by myself, on the fringes, hoping one of the tight knots of laughing children would break apart just enough to let me in. When they did, eventually, all would be well—until we picked up and moved again. I suppose I must have learned self-reliance and other valuable life skills, but mostly it still just makes me feel sad.

Southland Girls did not have a boarding facility, so home for Sheila was with an aunt, Henrietta Eliza MacDonald, at a house on Dalrymple Street. Etta, as she was known, was Roy’s older sister, born in 1879 at the Neck on Stewart Island. In her early forties during Sheila’s stay, she had borne three children of her own—Arthur, Hilda and Walter. Hilda died in 1929, and the boys, born in 1905 and 1911 would likely have left home by the time Sheila arrived. Etta was very strict, according to Sheila, and didn’t get on well with Roy. Sheila was treated well enough but had chores to do on Saturdays. In one of our interviews she recalled that she was required to “see to the dusting in the living room, then she [Etta] would come around and say ‘you’ve missed that bit there, go round and do it again’. [Etta was] very strict about table manners, ‘cut your bread, don’t bite it’. I’ve never heard of that anywhere else.”

The house on Dalrymple Street was not unfamiliar, as Sheila had recuperated there for many weeks after a life-threatening bout of scarlet fever when she was six. I have a black and white picture of her sitting on the veranda, alone bar the company of a stuffed bear and a couple of dolls. She looks happy and well-cared for. Aunt Etta had been kind to her, giving Sheila Beatrix Potter books to read, and probably the toys as well, since all of her other playthings had been burnt (she remembers the outrage and heartbreak of this even after eighty years) to
thwart the infection. There were apple and plum trees in the old-fashioned garden, along with many beautiful flowers. I tried to find the house but it is no longer there. Sheila later tells me it was pulled down and the section sub-divided into plots for smaller houses.

Aunt Etta was married to a surveyor and sometime Spiritualist Percy MacDonald. He told ghost stories and occasionally took young Sheila to séances where she said “the dead would communicate by table rapping, sounds like Morse code but it wasn’t quite like that. I suppose they had a code, two raps means ‘yes, I’m here’, three means ‘I’m alright, it’s ok up here, I’m enjoying it.”” Sometimes the participants tried to lift a table by faith. Sheila seemed troubled by these memories, saying she had tried to put them out of her mind as her father was so disapproving. I can well imagine how the ever-practical Roy would have felt about spiritualism and how he might have expressed himself on the subject.

Uncle Percy didn’t earn much money and Sheila felt that Aunt Etta must have had a hard time managing. But she recalls fondly, “everything was always very nicely done and I know I always had sandwiches and cakes at tea time in the weekend when she had ladies to afternoon tea.”

Sheila’s studies at Southland Girl’s High School offers some tantalizing clues about her development as a writer. She was very good at English, French and Latin. Math and science were another story. She was “abysmally bad” at both. I was surprised at this failure in science, given her childhood passion for natural history. But high school science was centered on chemistry, and Sheila wasn’t interested in such esoteric things. She told me, “Now, if they got me on to astronomy, via physics, I’d have been away. That’s one of my
great interests. Natural history, natural sciences, botany and zoology, different matter altogether.” Perhaps such subjects weren’t considered suitable for young ladies.

Sheila didn’t seem to have had much interest in the extra-curricular side of high school. She recalls being in the Girl Guides, but little else. Perhaps that had to do with the somewhat somber mood of the school and the country at that time, as New Zealand, like most of the world, was gearing up for another war.

In 1937, Sheila’s first year in Invercargill, New Zealand took steps to put the country back on a war footing. Michael Savage, head of the Labour government, was fond of repeating, “When Britain is in trouble, we are in trouble…” The government created a Council of Defence and prepared a dossier on needed administrative changes. There was almost no political or popular opposition to the coming war, except from the tiny New Zealand Communist Party, which still held an unjustified faith in the German-Soviet Non-Aggression Pact.

In 1939 came the announcement from Acting Prime Minister Peter Fraser that Britain was at war with Germany and that New Zealand would join with Britain. At first, perhaps, there was a giddy certainty that this war, unlike the Great War of 1914-1918, would not last long and take less of a toll on New Zealand. Men and boys enlisted, and were sent off with proud cheers. But grim reality soon set in. Brothers and fathers were lost in the trenches and air war, including my own uncle, Sgt Joseph Whittaker, who was a bomber air-gunner for the RAF.

On the 30th of July, 1942, after a successful mission to drop bombs on Saarbrucken, Joe and the rest of the crew were lost when their Wellington crashed at Pihen-les-Guines in France. There were no survivors. He was just twenty years old. I have sad memories of my
grandmother looking through the scrapbook she had made of his career and death, some thirty years later. Though he was buried just across the Channel, she was never able to visit his grave. The inscription on the stone reads: “Greater love no man know than this, that a man lay down his life for his friend.”

A total of about 105,000 men and women from New Zealand served overseas during the Second World War. Of those nearly 7000 died on active Army service and a total of over 11,000 in all services. Nearly 16,000 were wounded as well.

Such is the cost of war. But those left behind on the home front also served, in their way.

In New Zealand, the war meant rationing, blackouts, learning to roll bandages for first aid, weaving camouflage nets, and participating in drills for bombing raids that never eventuated. Sheila remembers singing patriotic songs in assembly and knitting peggy squares, which were six inch squares of knitting that could be sewn together to make large, brightly coloured blankets. They had become a New Zealand fixture during the depression of the 1930s. Other girls at Southland school remember saving and reusing every scrap of paper, as it had become scarce, as well as sharing textbooks.

Still, there were cheerful times as well, as I find out when I visit the school. I am greeted by their archivist, a friendly and helpful Old Girl named Barbara Clark. She takes me back to her office, which is a high-ceilinged but tiny room in the back of the main block. I am disappointed to learn that the building I am standing in is not the one in whose halls Sheila scurried from class to class, although it looks old enough. This incarnation of the school, built on Tweed Street, was finished in 1948 after a long wartime delay. It is, Barbara tells me
proudly, the largest wooden-framed building in New Zealand. It looks the part, with its two-storied wings and long hallways. The redolent scent of floor wax and old books take me back to my own school days and it cheers me to think that schools are much the same the world over.

I have to content myself with a picture of the Forth Street School that Sheila attended, built in 1907 to replace the old, old school on Conon Street. That school had been shared with Southland Boys, but not in any co-educational sense. The students were not allowed to mix, even at lunchtime, as there was a high wall between the two domains. Forth Street School was an imposing two-storied brick and stone edifice, shaped like the letter T, designed by Charles M. Roberts, and built at a cost of around £4000. That is almost $800,000 in modern New Zealand dollars. Students and teachers rejoiced at the opening of the “new” school which had, according to Miss King (principal 1919-1921):

…a real staff room, a roomy one, overlooking the garden reserve opposite. There was a hall. There were classrooms upstairs and downstairs, with cloakrooms above and below, and the Principal’s office opened off the entrance hall. There were two tennis courts, enabling us to hold our sports at home. Commercial classes were added and science laboratories built, and the willow tree in the corner became a favourite shelter not only for lunch-time, but also for outdoor lessons.

Sadly, the Forth Street school, although in use for many years as a primary school training centre and later as the Southland Board of Education offices, was eventually torn down and replaced with a faceless, modern building.
Barbara has a few exercise books and an autograph book belonging to Sheila, and I am charmed by her careful penmanship and colourful drawings. She is something of a poet, as this entry from an early exercise book, written mostly in iambic pentameter, reveals.

Silver Jewels
The sky is studded with a million jewels
Each throbbing with a frosty silver light;
Some silver-white, some faintly tinged with gold,
Sending their mystic radiance through Space.
For in the Southern Sky, behind the hills
A pale clear aurora, misty-white
Is shooting brilliant pillars far above,
Which, slowly fading in their turn, give place
To streaks of rosy quivering light.
A glorious display of colours clear
Fills all the heavens with a magic glow
Then like a golden dream it fades away
Only the stars remain.

Sheila was also using the keen eye for observation that she acquired as a child on Stewart Island, but now her lens had turned from orchids and sea birds to people. In an essay she describes a woman she christens “Aunt Sally”, who was a fellow passenger on a crowded tram. Sheila writes:

She wore a fantastic-looking hat on the side of her head, crowned with what looked like a baby parakeet in full flight. Around her flabby neck was a necklace of huge red glass beads and her elaborately waved hair curled round her enormous ears on which
she wore two gold earrings, rather like fish hooks in shape. It was very hot and stuffy on the tram and I could see that “Aunt Sally” was really suffering from the heat. She, very unwisely, had round her neck a thick expensive fur collar, and wore a heavy, plush coat. Her face was heavily coated with powder and her eyebrows – probably false – curved upwards in a most unnatural fashion giving her a very stupid expression. Of course her lips were coated with moist, scarlet lipstick, which looked very bright against her powder-coated face.

Not overly kind, perhaps, but the description convincingly conveys the image. It is easy to see the budding author in young Sheila’s assignments, and the artist as well. Her drawings, executed in pen and ink, with colour washes overlaid, are technically very accomplished. The subject matter is sometimes childish, as in the case of the Shepherdess image reproduced below, but she was also capturing birds and even a classmate’s beloved pet with her drawings.

Figure 6 High school drawing by Sheila Natusch
The Principal of Southland Girls at the time when Sheila first arrived was Miss Ada Eastwood, who had come to the school from Wellington in 1932. Sheila remembers her as very traditional and a stickler for propriety. She insisted that the girls wear their scratchy black woollen stockings all summer so as to look tidy, and was “so just she was almost unjust” as Sheila put it in a letter to me. I find a faded black and white picture of her in the Southland Girls Centennial magazine, standing behind an ornate lectern. Thick stockings, sensible shoes, long robe, white hair in a bun—yes, very much the old school sort of lady principal. However, given that she had guided the high school through the worst of the depression, when funds were education were sparse, that sober dignity would have been well appreciated. Much later, when she had retired to Karori, in the Wellington area, Sheila used to bicycle over to visit her and share cups of tea.

Miss Muriel May took over the Principal’s position in 1941, which was Sheila’s last year at Southland Girls. As modern as Miss Eastwood had been staid, Miss May was loved for allowing the girls to sport bare legs and white “sockettes” in the summer. She encouraged them to come to school even when they felt unwell, which was probably a euphemism for menstruating. Sheila, however, has mixed feelings about her former principal. She recounts in a letter that “Miss May had misunderstood something I’d done or left undone and said ‘There’s something slinky about you, Sheila’”. She added, quite tartly, “I never forgave her for that remark.”

After staying with Aunt Etta for a year and a half, Sheila moved to Holywood Terrace to board with Jack and Alice Oliver. Alice, whose nickname was “Girlie”, had been a Moffett, and so was related to Sheila through Emily’s marriage to Tom. They had two daughters, Peg and April, and one surviving son, Geoff, who was about Sheila’s age. Sheila seems to have
had a difficult time with Geoff, who was rather interested in “biology” as she drily characterizes it, and wanted to learn more about the female reproductive system first hand. One evening, while they were out walking the family dog, he became quite insistent. Although Sheila successfully fended him off, they were late home as a result. Geoff gave a lame excuse, saying the dog had run after a rabbit. Uncle Jack, unimpressed, sent Sheila away shortly thereafter, saying “You eat too much, we can’t keep you here.” Hardly an imaginative excuse, since Sheila, under five feet tall, could not have been much of a drain on the pantry. I find this quite a sad tale in some ways, but Sheila, with her characteristic good humour, describes Geoff as a “nice chap” who had lost his older brother in the war. She still gets great amusement out of the idea she was considered a *femme fatale*.

Emily Moffett, Sheila’s grandmother, moved in with Roy and Dorothy after her husband Tom died. She had a quick temper, and was not averse to standing up to Roy when he criticised her daughter, especially since Dorothy would never defend herself. Roy found his mother-in-law’s interference infuriating and eventually threw her out of the house. Emily arrived in Invercargill with nothing but a suitcase, and came to live with Sheila at a house owned by a Mrs Girdler. Sheila chafed under the constant supervision of Granny Moffett, who had been raised in an age where girls were considerably less adventurous than her spirited granddaughter. She writes in *Emily and Dorothea: Two Southland Artists*:

> Granny did not approve of my cycling alone to Oreti Beach for Saturday swims, hinting at dire, unexplained perils of which I had no inkling until an elderly (more likely middle-aged) pest began riding alongside of me, trying to edge me off on a detour among the sand hills. I outwitted him by sticking to my beach swim and staying in the sea long after the sun had gone down and everyone else—including the prowler round the sheds—had gone home. Then I changed, got on my bike, and raced
home. I suppose I had to account for my lateness. At all events I was from then on stuck in the house all weekend, driven mad and nasty by cabin fever, and taking it all out on my private diary—inadvertently-on-purpose opened by my grandparent.

Eventually Emily’s banishment ended and she returned to her daughter on Stewart Island. Sheila went to board with Miss Molly Cotton Rowley on Grey Street. This house, unlike Aunt Etta’s, is still standing. Nice old-fashioned garden and trees, double garage, mullioned windows—it still looks like someone’s cherished home, though Molly Rowley is long gone. She was a distant step-relation of Sheila’s, the sister of the wife of George Moffett, Tom’s brother. Sheila describes her in a letter as a pretty little old lady with white hair and pink cheeks. Molly’s niece Betty also lived with her while attending a private school in the town. Betty came from a wealthy farming background and while it would seem on the surface that she and Sheila would have little in common, they managed to get up to quite a bit of mischief together. Sheila rather shamefacedly recalls terrorizing a kindly old babysitter named Milly Saunders when she and Betty lowered “mysterious objects” down the chimney from the rooftop. They also made toffee and burnt the saucepan and “generally behaved like barbarians”.

Sadly, this schoolgirl fun did not last much longer for Sheila. After the end of her fourth year in Invercargill Roy insisted that she return to Stewart Island for good to take care of her grandmother, whose ill-health and querulous nature were again causing trouble. This manifest unfairness bothered Sheila greatly, but she could not change her father’s mind, even though it meant she now had no chance to compete for a scholarship that would allow her to continue her education. University, in those days, was paid for by the government, but
enrolment was limited to those who had passed a series of exams in their last year of high school.

When her classmates went back to Southland Girls for their last year of study, Sheila remained behind, trapped by family commitments. Her dream of going to university seemed to be sailing over the horizon without her, but she did not give up. The resolve that would be such a feature of her personality as she aged blossomed in earnest after her abbreviated high school career. Sheila never faltered in her desire to remain true to who she was and what she wanted. She recalled to me, in an interview, that her career desires had firmed up by the time she left Southland Girl’s. “I remember when I was leaving school, we were lined up and asked ‘What are you going to do with your life?’ and I said, ‘I want to be a writer and an artist’ and they said, ‘Oh, ho ho. Fat chance.’”

She had the last, no doubt very satisfying, laugh there. Sheila has achieved both fame and success in those endeavours, and has been honoured by her old high school. I am cheered to see a display of photographs and biographical material dedicated to Sheila on the wall just inside the school’s main hallway. A greater accolade was in the school’s decision, in 1968, to name one of the houses after her. The girls themselves voted for the six women so honoured and Sheila is in the prestigious company of Jean Batten, an early aviatrix and adventurer as well as Doris Gordon, a physician who was instrumental in setting up a well-organized maternity system in New Zealand, the pianist and Old Girl Janetta McStay, the writer Katherine Mansfield and Olympic gold medallist Yvette Williams.

Southland Girl’s High School yielded a trove of good information, but my last research stop, the Southland Museum, was not such a success. Although the staff there were helpful they
had little to show me about the Traill family. The curator spoke vaguely of a plan to mount an exhibition “sometime” but I got the impression that there is neither the will nor the money to make this a reality. No matter. My trip to Invercargill had given me plenty of information and impressions that I could use for Knowing Sheila. Sheila used her time there to refine the observational skills she had learned on Stewart Island and express it in descriptive writing and poetry. She had made the decision that she wanted to be a writer and artist, a tall order, especially for someone who had no prospects of further education. How would she make her dreams come true?

I headed back to Dunedin in high spirits, ready to tackle that question in the next phase of Sheila’s life. I had no idea then where that would take me.
Chapter Four—Chasing the Dream

A call came out of the blue on April 11th. A film maker named Hugh McDonald, wanting to know about my book on Sheila Natusch. A quick foray with Google uncovered a stellar career—he is the man responsible for “This is New Zealand”, a revolutionary film shot and edited to show on three screens simultaneously. Premiered at the Osaka, Japan Expo ’70, the film was viewed by over two million people. It then came home to New Zealand and enjoyed a popular run in cinemas that had to be specially fitted out to handle the complexities of a film that needed four projectors and three screens. He’d done a lot of other things too, even been nominated for an Oscar. I couldn’t think what he would want from me until I learned another piece of the puzzle. He is a relation of Sheila’s, the grandson of Percy McDonald the spiritualist, whom Sheila lived with during her high school days in Invercargill.

Hugh is a charming guy with a ready grin, fond of jokes and good food. He lives in a suburb of Wellington called Lyall Bay, not that far from his cousin Sheila. On the phone he told me he was going to make a documentary about Sheila, something he had been wanting to do for a long time. He felt time was growing short, so had secured some funding from New Zealand On Air to begin the process. Was I interested in helping out? He wanted me to talk about Sheila’s university career, when she was living in Dunedin. Just the part of her life, coincidentally, I was preparing to write about. When I hung up the phone it was with a sense of wonderment—and abject fear. Hugh McDonald thinks I’m an expert on Sheila Natusch, but I’m not! He wants to film me talking to her, asking questions and making intelligent remarks in return. What if I come across as a phony?
But this was too good an opportunity to pass up, so despite my insecurities I agreed to meet Hugh and his producer, Dr Christine Dann, in Wellington. I had already planned to visit Sheila on May 19th, and this fitted in nicely with his plans. It seemed fated.

I wonder if Sheila felt the same way when she learned from a friend that her dream of attending university might still be possible even though she had not been able to finish her scholarship year at high school. This friend, whose name has been forgotten, casually mentioned that if one was willing to attend teacher’s college, then they would be allowed to sit two university papers a term. I can well imagine the arguments that must have taken place when Sheila announced that she was leaving Stewart Island. Emily and Dorothy probably begged her to stay. Sheila writes, in *Emily and Dorothea, Two Southland Artists*;

> I should have been kinder. Youth has no idea of Old Age. One of Emily’s notebooks quotes a piece from “Ships that Pass in the Night” about dealing with isolation; this along with a photograph of a frail, tiny figure sitting alone, still jabs my older, more experienced conscience.

Guilty conscience or no, Sheila applied, and was accepted into the Dunedin Teacher’s College, which gave her a chance to attend the University of Otago at the same time and earn a degree. Even though she really had no interest in teaching, it seemed a decent enough occupation, and one that might allow her time for writing and art.

Sheila travelled to Dunedin and started Teacher’s College in 1943. Her first home was a hostel for women on Royal Terrace, run by the YWCA, called Braemar House. The building remains. It is a tall, quite august-looking home, that at one time belonged to a wealthy banker. When I visit, on a wintry July day, it looks leaden and a bit dishevelled. Tagged with graffiti,
with empty bottles and rubbish lying about in the front garden, it seems a relic from a past age. Just one of many student flats now; the front door is locked, so I don’t try to get inside. When Sheila lived there, it was filled with Christian female students, who often passed her as she studied on the back steps, on their way to church. “They were probably all praying for me” she remembers, with a shrug and a smile. Sheila has never been a spiritual person. Science won her head and heart first, and she never bothered to try and reconcile the two.

It wasn’t long before she made her first and undoubtedly most famous friend, the late Janet Frame, one of the leading literary lights in New Zealand. Janet, who at that time was going by the name Jean, was another poor girl longing for University who took the practical route of enrolling in teacher’s college. Both she and Sheila found comfort in each other’s shyness and outsider status. Janet had been born in Dunedin, but spent her early years living in a blur of small towns, as her father worked his job as a railwayman. The family later settled in Oamaru, which Janet fictionalized as Waimaru in her thinly-disguised novels about her childhood and life. Her travails with the New Zealand mental health system are well known now, but in those early days of teacher’s college she and Sheila were both giddy with the opportunities for learning. I’ll let Sheila’s words from *Letters from Jean*, a book she published after her friend’s death, speak to this:

> Languages and literature, for the taking! The old-fashioned, courteous, scholarly professors (soon to be dust before newer brooms); the antiquarian bookshops; symphony concerts, plays – meteor showers of information and enlightenment.

Sheila and Janet became confidantes. Walking the windswept beaches of Dunedin, they shared their writing with one another, and also their unhappy love lives. Sheila had fallen for a man who was already engaged, though he didn’t think to mention it at first. His code name,
in the girl’s conversation and correspondence, was Y.K.W. for “you know who”. Janet, already somewhat unstable, had developed an obsession for a postgraduate student named John Money, whom she nicknamed H.C.F, for “highest common factor”. After she overdosed on aspirins, he became her analyst. Janet says in her book An Angel at My Table that she fabricated many psychological symptoms that reinforced her early diagnosis as a schizophrenic in order to keep their sessions going as long as possible.

She and Sheila kept in touch over the years, exchanging many letters and cards. Sheila was the one of the first to see the original manuscript of Owls Do Cry, though at that time Janet was very unsure of her own talent. In a letter dated April 4th, 1947 she wrote:

Dear Sheila,

Thank you very much for your lovely letter. I am keeping your letters so that one day when you are famous and all your manuscripts have been found and people are racking their brains to find out what the REAL S Traill was like, lo I will produce your letters and say behold the REAL S Traill, and people will give me guineas and trips to Hollywood and offer me film contracts and they will put your letters in a glass case in the museum and Y.K.W. old and bald, with a limp and fat wife will be walking the Museum one day and he will stop before your valuable letters and say sadly look Belinda, I misunderstood her, she was destined for fame…

It is, of course, Janet who was destined for fame, and it is her letters that have been pored over. Sheila has published a small collection, the Letters from Jean quoted above, which is illustrated by some charming watercolours now housed in the Hocken Library in Dunedin. She seems unconcerned about the success of her erstwhile friend Jean, saying:
I am no Janet Frame (who is?). I could grovel about, mumbling something about being a feeble glimmer under a bushel, all but gone out, invisible alongside the splendours as iridescent as the polished glass reflectors of a great-light house; but I don’t know that the Janet I knew would have wanted that.

I read *Owls Do Cry* as part of my research for writing this book, and though I recognize it as a fine piece of writing, I know whose works I prefer. And whose life, if I was tasked to live one or the other, I would choose. Fame isn’t everything. There is deep satisfaction in a life lived well, on one’s own terms.

Janet Frame, who wanted most of all to be a poet, wrote poetically about Dunedin in *An Angel at My Table*:

> “I was alone in my first big city. My mind loomed with the fictions of the great cities of the world, and of Dunedin as such a city. I thought of the ‘dark, Satanic mills’, of people ‘caged like squirrels’; of fire, and plague and the press gang; and although I was willing to follow the examples of the writers and eventually ‘love’ the new city, as Charles Dickens, Hazlitt, Lamb, loved their London, I could think first only of desolation, the poverty I was sure I would find, and of how living in the city might destroy me…”

Such words make me smile and shake my head. I lived in a much, much bigger city before I moved to Dunedin fourteen years ago. To me Dunedin embodies all the recessive charm of a small town, light years away from the wearied faces and fears of those thrown together by chance in the bubbling cauldron of Big City Life. You have only to meet someone to discover
that he/she went to school with someone else’s cousin, who married the sister of so-and-so. The six degrees of separation here melts to almost nothing.

But Sheila, no doubt, also felt that loneliness and isolation, after leaving her most insular of childhood homes—Stewart Island. Knowing her, she would have shrugged it off and moved forward with the business at hand, acquiring the most education possible in the shortest amount of time. The institution which drew her, the Dunedin Teacher’s College, already had a lengthy history. It was founded in 1876, after the Otago Provincial Council recognized the need for more teachers to cater to a burgeoning population brought to the area by the discovery of gold in Gabriel’s Gully in 1861. After outgrowing its original building on Moray Place, the college moved into larger rooms on Cumberland Street. By 1943, when Sheila began her studies, the college had moved again, to Union Street; a very large, clean and modern facility with quiet grounds and a spacious library. The Principal at that time was Ernest Partridge, M.A., called “Party” by the students (behind his back, no doubt). He was a local, brought up on a farm, who had been a student at the Training College before moving on to teach in various parts of the country. His biggest difficulty when starting his position in 1940 was the dearth of male students, with the war claiming many potential applicants. In December, 1942 the student ratio was 269 women to 28 men. Nowadays, in our more enlightened society, this might seem unimportant, but in the forties men still ruled the educational roost, and women were considered second rate teachers.

Partridge was an innovator in other ways, though. He totally revamped the timetable, added remedial work for those in need, expanded the library hours and added speech training to the curriculum. His view on teaching and learning must have thrilled Sheila: “many students
during this period savour for the first time in their lives the real significance of disinterested study, the purposeful pursuit of knowledge.”

As befits someone with her wide ranging interests, Sheila did not limit herself to humanities or science but partook liberally of both. In addition to her lessons at the Teacher’s College, she signed up for papers in English, French, Zoology, Botany and Geology at the University. It would have been a very difficult thing to balance the academic requirements of the University with her other commitments, but Sheila did well in all the subjects she tackled, with the exception of Stage III French. She had been struck down with the measles, and although her other lecturers were happy to use her previous exam scores to help her finish out the year, Vera Barron failed her, meaning she had to repeat the paper the next term. She took tutoring from a retired French teacher to help her catch up on the material she had missed, and eventually passed. Though Sheila rarely complains, the unfairness of this still irritates her, sixty years on. She remembers: “Miss Barron said I would make myself ill if I tried to take on too many things at once and when I got the measles she refused to help, even though my other lecturers were happy to give me a pass. I had to finish a term later than I needed to.”

English, which she studied with a speciality in Icelandic saga, was one of her favourite subjects, as was Geology. Sheila recalls riding her heavy framed single-gear bicycle (“the best bicycle I ever owned”, she tells me) far and wide on the hills around Dunedin, returning loaded down with various rock samples. She made a splendid impression on William Noel Benson, the head of the Geology department. In charge from 1916 to 1955, Professor Benson is remembered fondly as a grand old eccentric, by Sheila and many others. While the University had always encouraged the participation of women in every subject then available, before mid-century their presence was rare in the sciences. The “School of Mines”, the
predecessor of the Geology department, allowed no women at all. But Sheila, one of only two women in the geology class, was treated with avuncular courtesy by Professor Benson who took to calling her “Little Miss Traill”. Some of her male fellow students were less welcoming, no doubt due to being shown up by their diminutive classmate who could out-walk and out-think most of them. She recalls, in A Pocketful of Pebbles, a couple of amusing anecdotes from her time with the unflappable Professor Benson:

Our professor, snowy-haired and silver-spectacled, seemed more at home in the Upper Cretaceous than the present, quite oblivious to the scuffles and giggles at the back of his step-type classroom, where a clown of a miner had taken over a girl student’s knitting. Alas! down fell the ball of wool—bump, bump, bump—coming to rest at Professor Benson’s feet. (“As I was about to say, these great marine reptiles…will the gentleman who has dropped his knitting be good enough to retrieve it? … thank you…”)

…

And when we brought along our own rock samples for identification—Burnside mudstone, Caversham sandstone, Cargill basalt, all lined up alongside a naughty chunk of brick, the last was identified as “a piece of…let me see…impertinence”.

In order to make ends meet during her five years of study, Sheila took several part time jobs, as well as being paid for teaching as an intern, mostly at Ravensbourne Primary School, down the harbour from Dunedin. She worked as a lab assistant in the Botany department under Geoff Bayliss. It was there that my mother-in-law Jill Hamel, encountered her, sometimes sketching when she was meant to be setting up labs. Although Jill speaks highly of Professor Bayliss, Sheila has less fond memories. Jill’s status as a bright student gave her one perspective, but Sheila felt she was treated as nothing but “hired help”, told to make the
tea and then clear out of meetings with staff and students. No wonder she felt like goofing off sometimes!

One drizzly day in July, I visit the Botany Department gardens with Jill. Our guide is Vicki Tomlinson, the departmental technician. I’m surprised to see she isn’t dressed in a lab coat, or even wearing latex gloves. She has a nice office, down a narrow corridor, just by the stairwell. I don’t think her job title does her justice, really. When I explain that I would like to see the place where Sheila sometimes worked, she grabs a set of keys and we follow her across busy Cumberland Street to high-fenced area just behind the Otago Museum. I’ve probably walked past the fence a hundred times without ever wondering what was on the other side, but now I find out. Inside are many beds of greenery, and some bare spots of freshly turned soil; experimental plots for botany students and researchers. It is a curious place. I’m used to gardens existing in the service of beauty, or for growing vegetables. This seems sterile, for all the plants growing here and there, and somehow clinical. There are paths crisscrossing between the raised beds and several low very modern looking glasshouses, all with the latest temperature and moisture control systems, Vicki informs us proudly. Jill looks around, perplexed. It’s nothing like what she and Sheila knew, back in the late forties. We wander over towards the back of the Museum grounds. There is a path here she recognizes, and a line of tall lime trees. “I used to weed around these when they were just saplings,” she recalls, “and Sheila would have too.” I take a picture, and later show it to Sheila. She nods at it vaguely. It’s obvious that the Botany Department has moved on from the time that she and Jill laboured amongst the beds and simple wooden greenhouses.

When the University of Otago, New Zealand’s oldest tertiary institution, was founded in 1871 it had just three professors. First housed in a building in the Exchange, on Princes
Street, it moved to its present location in 1878, with the construction of the iconic Clock Tower building. Enrolments in Sheila’s day hovered around 1,500 students, over half of whom were medicine, pharmacy or dentistry students. Compare that with the present total of around 21,000 warm bodies and over two hundred different degrees and qualifications, and it is easy to see why the University is all but unrecognizable to Sheila and Jill now.

Sheila found that University could provide useful social contacts as well as a thorough grounding in the Arts and Sciences. She joined the University tramping club, and participated in many walks and climbs around the local Silver Peaks and further afield. Her reputation for charging ahead of the pack because she wanted time to collect botanical specimens was not universally admired. One of her fellow trailblazers rebuked her: “You are neither a man nor a dog, but somewhere between!” She had a rough kit of tramping gear, well-used but not flash by anyone’s standards. In an article for New Zealand Woman published in November 1967 she speaks of a fellow climber’s pack thusly: “Fillie’s swag was a stiff spanking green. Mine smelt.”

The Fillie mentioned in the article was a Miss Phyllis Boal of Wellington. She and Sheila had set out on an Easter holiday tramp together, intending to climb the Garrick Range and then Double Cone in the Remarkables. The article, called Not Lost... But... is an excellent example of Sheila’s writing, funny and acerbic in turn. She calls herself Sally Tracke, but the self-deprecating humour is all Sheila. Fillie was described as:

…dainty and attractive, with enormous eyes like blue stars and spiky black eyelashes; she liked nice clothes and took lipstick with her when she went tramping. I did notice that she seemed to be going extremely well for such a frail-looking girl. She fairly
danced along, keeping up a bright stream of chitchat, and batting her eyelashes like mad: I’d have been batting mine if they’d looked like hers.

Hard to imagine any two girls less alike, both in looks and temperament. Fillie kept up a barrage of questions as they started off on their first day together: *What were her views on life? Boys? Marriage? Make up?* Sheila thought such things were “all right in their place” but was thinking more of mountain daisies, mica, schist and English Literature. Soon Fillie grew tired. She wasn’t as fit as Sheila, and was used to tramping with gallant boys who would relieve her of the heavy items in her pack. She complained Sheila was going too fast and her load was too heavy. Sheila, who was “ready to get it over with,” ended up taking most of Fillies’ supplies. They spent the first night at a friendly water-race keeper’s hut—

Fillie ventured anxiously ‘Oh Sally, do you think it will be all right?’ ‘Of course it will,’ I returned crossly, and of course it was.

He sent them on their way in the morning with breakfast. Sheila’s companion soon got into trouble and had to be rescued off an exposed spur, (“But it looked so much easier than that horrid path” said Fillie, fluttering her eyelashes) which put them behind and left Sheila feeling “morose”. They made it to Doolan’s Hut after dark and spent the night. The next day they started off in high spirits, but Sheila had misread the lay of the land, and they ended up on the wrong side of a high ridge. They had to cross it to get back to the track, but Fillie complained bitterly at this. Sheila kept going, doggedly listening to Fillie chatter about the Dental Ball, and dresses and—

On and on it went. It mingled with the crick-creeek-crick of cicadas and the murmur of the creek that rose with us. Suddenly I realized with a start that the murmur was the creek and the insects. Fillie was no longer with me. Surely she wouldn’t… Oh yes,
she had. She was in the gully. Well, I thought, let her flounder. She couldn’t come to
any real harm. In the meantime I’d better push on and get that fire going; she’d see the
smoke—surely that would keep her more-or-less on course.

I can almost hear an echo of Roy’s impatience (curse the girl!) in that. In any case, Fillie did
not turn up. Sheila went back down and hunted for her, but when it grew dark she was forced
to spend a night in the open. This wasn’t as dire as it sounds. She was well-supplied and used
to sleeping rough, thanks to many tramps with her father. The next day she lit more signal
fires, walked up and down the ridge calling for her companion, and then spent another
exhausted night in the bush. She describes her feelings:

After the moon went down, the stars almost seemed to brush my face. Every time I
woke they’d wheeled further round. It’s the nearest I’ve ever got to complete lonely
silence; and though I was worried to death, part of me exulted—shameful to relate.

Lovely stuff. The next day she considered tackling the Remarkables alone, in case Fillie had
gotten hopelessly off track. But then (“suddenly it broke over me like a wave…”) she realized
that Fillie had probably just given up and returned to Doolan’s Hut without her. She headed
back there, though it took most of the morning to reach it. A plane passed overhead at one
point, and it didn’t occur to her that it might be searching for someone. When she reached the
hut the awful truth became apparent: Fillie had indeed turned back the first day. Sure that
Sheila was lost, she had eventually called Search and Rescue. The hut was crawling with
constables and volunteers, who greeted her tersely. What had she been thinking to go off and
leave that poor girl like that? They made their way back down the mountain by horseback.
Sheila relates:

At Gibbstown, Fillie, fresh, clean and lipstuck, looked at me with eyes like saucers.
‘My dear, where on earth did you get to? I was frantic.’

‘That’s right miss,’ said the policeman.

The story was written up in the local papers, sticking to Fillie’s account, leaving Sheila feeling mortified. She wrote a letter to the editor trying to set matters straight, but the headline, in another paper: “Sheila Misses the Traill” upset her greatly.

Despite this setback, Sheila became a celebrated mountaineer, and was written up in a piece called ‘There’s something frisking along behind me’ Women and mountaineering in New Zealand 1920s-1950s, by Jennie Gallagher in The New Zealand Alpine Journal. The article, published in 1995, described a new breed of women who were fit and capable mountaineers that “appeared to defy boundaries between what their contemporaries considered feminine—demure, delicate and graceful—and masculine: strong, successful, enduring.” There were pressures to keep up and keep on, no matter what. Sheila recalls, on the Murchison Glacier, which was a very different sort of climb than she was accustomed to:

Now I could say you go on to the top, I shall sit here. [But she didn’t, of course.] It was not pressure put on me but an atmosphere I perceived where you had to be good, you had to go well and you mustn’t lose your nerve.

Sheila was never the sort to let a challenge go, so after completing a BA in English, in 1947 she decided to do a Master’s Degree as well. During this time, she lived in the Church of Christ Seminary in Leith Valley. About to be evicted from her present digs, boarding with a woman and her small child, in desperation Sheila called in at the Seminary to see if they had rooms for let. They did. Times were pretty tough for the school, which had seen its enrolment drop precipitously as the church became a less desirable option for employment. Although
the school was male only, inexplicably they had a women’s dormitory, which Sheila occupied alone. There was a big room with many dressing tables which she used to arrange her rock collection. Living there must have been a lonely experience, although she did make a friend in one of the students who was having trouble with his French studies. She made the mistake of visiting his room one evening, and (God Forbid!) sitting on his bed while she tutored him on the intricacies of grammar. The matron arrived and there were harsh words that almost resulted in Sheila being turfed out. But, with her characteristic charm, she defused the situation and was allowed to stay.

Sheila spent her last few months of her post-graduate career living with her cousin Leslie and working at John McGlashan High School. Her job title, though she was little more than a glorified maid, was domestic general—mostly it involved washing smelly socks and serving up food to surly teenaged boys. She spoke to me of her utter exhaustion as she pedalled madly between home and work and University, often showing up late to lectures. But through sheer force of will she somehow finished all her papers in Old Norse, Icelandic, English literature, Milton, Shakespeare, and history of literary criticism and graduated with an MA in 1948.

*Figure 7 Sheila’s graduation photograph (1948)*
Sheila now had enough education and a qualification to set her on her way in the world. But teaching as a profession really didn’t appeal to her. A forthright supervisor had said she was “too nice” to be in charge of a classroom and after her attempts at student teaching, when her pupils ran wild, she was sure that he was right.

So if she couldn’t teach, what was she to do? Were her qualifications and University career a waste of time and money? I am sure she didn’t think so. She had earned two degrees through bloody-minded hard work, acquired a strong education in the sciences she found appealing—zoology, botany and geology—as well as making a good friend in Janet Frame, another woman determined to make it as a writer. All of these things must have hardened her resolve to begin the next phase of her life, as well as giving her the tools she needed to become a professional writer of science and other subjects.

Moving back to Stewart Island, to become the wife of a fisherman, was never an option. Though she would miss the rugged, bush-clad slopes of her home she knew that the Island, for all its charm, could not offer her the job opportunities she needed and the intellectual stimulation she craved. She had only to look at her mother Dorothy, worn out before her time by isolation, hard work and her husband’s fierce temper, to see that she might make a better life elsewhere. A half-promised job offer at the Dominion Museum sealed the deal. Sheila would leave her familiar haunts behind and go north to Wellington to pursue her dreams.

I’ve found in Sheila’s university career another piece of the puzzle. The girl who confidently declared in high school that she wanted to be a writer now had the background she needed to write competently about science and a new friend to encourage her dreams. What would her
life in Wellington offer in the way of opportunity, both for writing and the making of new friends? I know I must head back there myself to find out.
Chapter Five—The Big Smoke

I adore Wellington. It has a very small town feel about it, and every time I visit here I love to explore the different neighbourhoods and the downtown area. Te Aro, where I stay, is very convenient to heart of Wellington, with Te Papa just down the road, and Moore Wilson’s, the best grocery store in the whole world, just about right next door. Buses come and go on Courtenay Place and it’s easy to get anywhere you want to go. After my first visit, when I didn’t know any better, I’ve never ever bothered to rent a car. Parking is a problem, anyway; expensive and unreliable. Then there are the women; striding along with their heels and power suits, looking like they are on their way to a meeting with the Prime Minister. They make me feel both proud of my gender, and—in my jeans and sensible flats—a little intimidated. The waterfront is beautiful for a stroll, and there are many green public places and parks. You can see mountains on the horizon, and the sea is right there. The best of all possible worlds, except for the wind. It comes howling up the harbour most days, ruining power hairstyles and umbrellas—but then, nowhere is perfect.

Sheila wrote a book about Wellington in 1981, called Wellington With Sheila Natusch, published by Millwood Press. It’s really a love letter to her adopted home, dealing with flora and fauna; streetscape and skyscape; and many colourful illustrations of the kind she does so well. Here is a quote:

Wellington is an exuberant blend of old and new. It had seen many a change before ever there was a motorway, deplored by so many, but here now to stay. There has been imaginative use of stonework, lighting and planting, and if the Bolton Street cemetery we knew has gone for good, enough has been left to give later comers some inkling of its former elegiac peace. The new buildings
towering up and up, but not soaring to the heights of cloud-piercing Sydney and Melbourne, come extravagantly alight in the dusk, and their glass walls shimmer by day with wavering, mellow and almost Venetian reflections. Twilight, when a townscape not yet drained of colour begins to twinkle with lights, is a magical time.

Sheila admitted, in Wellington and also to me, that she had mixed feelings about her new home when she first arrived there. She had heard about the wind, but that day in May 1949, when she wheeled her bike on to the frosty wharf from the ferry Hinemoa, “all was so calm, shining and still that it was hard to believe those tales on everyone’s lips”. Others said, “Wellington has character, it’s bracing you know—it will grow on you”. But an encounter with a rude shop assistant, who had suggested some sort of comprehensive skin care regime to cover her “sunburnt and sandfly bitten Stewart Island face,” left her fuming. “I wanted no part of that Wellington growing on me, nor me on it. Pushing off my bike to the coast, I gulped in fresh sea air, so much more to my taste than powder and paint, and began to cool down.”

It was the sight of the Inland and Seaward Kaikouras floating like ethereal clouds on the horizon that sweetened her view of Wellington. “A town from whose outskirts the South Island snows might be glimpsed was not all artifice and trivia—it might grow on me after all.”
And so it did. Sheila joined the Hutt Valley Tramping Club and the Botany Club, and spent her weekends exploring the countryside in the company of friends or alone on her trusty bike. When her job at the Dominion Museum didn’t seem to be available after all, she found another easily, at the National Library. The work wasn’t very exciting, so when Sheila met Averil Lysaght on a trip back to Stewart Island, she asked her to remind Robert Falla, the director of the Dominion Museum, of the job she had been promised. An offer arrived shortly thereafter. The job, botany assistant, sounded grand but turned out to be otherwise. “It was mostly just scribbling things on the backs of cards,” Sheila remembers ruefully, “just like the library”. Sometimes, when bored, she would sketch little scenes on the back of them instead, which led to a dressing down.

The museum, which later became Te Papa, was then housed in a handsome stone building on Buckle Street, known informally as “Wellington’s Acropolis”. It now forms part of the Wellington campus of Massey University. Dr Robert Falla, one of New Zealand’s most celebrated scientists, became the museum’s director in 1947, in an era when the facilities and staffing had been severely curtailed by the war. An ornithologist and teacher by trade, he oversaw the expansion and refurbishment of the museum’s exhibition space and displays. Although a good leader by all accounts, he found administration and committee work tedious and time-consuming. Maybe that explains what happened to Sheila.

She stayed at the museum for about a year. At that time she was boarding with a Mrs Demuth, who owned a house on Turakina Terrace in Thorndon. I had a look at it, through the magic of Google Street View. It’s a cute little white framed house, with blue shutters and a picket fence, and probably worth about a million bucks in these days of urban real estate.
exorbitance. Mrs Demuth, who worked in the public service, was outraged when told of Sheila’s salary, and insisted she should be paid more. Sheila duly went to Dr Falla to ask for a raise, but he would have none of it. “I had become engaged and I thought, museum pay is going to get me nowhere and I won’t even be able to buy tea towels, not that I was greatly interested.” So Sheila found herself a job at the Correspondence School, and submitted her two-week notice to the Museum. When she told Dr Falla she was leaving he remarked caustically, “It’s always the same with people who get their friends to inch them into a position.” Even now, after almost 65 years she still remembers her hurt and outrage at this remark—“I thought ‘you bastard’ but there was nothing I could say. Because of my relationship with my father when I just used to be struck dumb when he was having one of his rampages, I just couldn’t speak. I sort of rushed off and had a good old wee and that was that, end of museum and beginning of correspondence.”

Why did this offhand jibe upset Sheila so? After all she already had a new job; one that paid better.Possibly it was the implication that she had not earned her position at the Museum, but had merely taken up something given to her on a platter. Sheila could not abide patronising behaviour, even by one of the most highly respected scientists in this country. She had worked incredibly hard to get to Wellington with her MA, and to have the accomplishment belittled was highly upsetting. But, as is typical, once she had gotten over her hurt, she picked herself up and moved on.

The engagement that precipitated this crisis was to a fellow tramper named Gilbert Gardner Natusch, nine years her senior.
Gil Natusch was born on the 29th of September, 1917 in Wellington, to family of well-known architects and engineers. His father Charles Natusch, who went by his middle name Aleck, had come from Essex in 1886 on the clipper Canterbury, making the crossing at age three with his father Lewis Tilleard Natusch and his wife Ada (née Spencer). Lewis (who rather inexplicably was always called Charles) opened an architecture and quantity surveying firm that remained the family business until 1997 when his grandson Guy Natusch finally retired. The Natusches specialized in stately homes, both in Wellington and Hawke’s Bay. Aleck was the first of his ten children, two of whom died in infancy. He married Georgina Isobel Gardner in 1914. Gil was their eldest child, followed by a sister Barbara and a brother, David.

Gil always wanted to be an engineer, but did not join the family business when he graduated from the University of Canterbury in 1942 with a B.E. [Civil]. Instead, after a stint in the military, he went to work for Dorman, Long and Co, a steel manufacturer. When Sheila and he met, in 1949, he had just started a government job with the Ministry of Works.

Sheila first became aware of Gilbert at the tramping club rooms, when she went to hear a speaker. He sat towards the back of the room, with his head in his hands, muttering, all but ignoring the talk. “Probably thinking about an engineering problem,” she tells me laughingly now. She made enquiries and found out his name, but little else. They became better acquainted, in a way, on a long night-journey to Tongariro National Park with the Hutt Valley Tramping Club, where they planned to set up camp and go tramping the next morning. Participants lay in the back of a truck, rolled up in sleeping bags, top to tail. In these quasi-intimate circumstances she learned a lot about Gilbert’s socks and he about hers, but there was not much chance for conversation. As he was one to shuffle along with his head down in
the middle or end of the pack, and she was often out front, they had little to do with one another during the daylight either. Their first real conversation was not hopeful. On a night time walk to reach a hut, Sheila heard stags bellowing in the distance. Having heard the amorous stags all her young life deerstalking with Roy, she could imitate them flawlessly and did. Gilbert rebuked her sharply. Didn’t she know they were passing a hut and people were sleeping inside? Sheila instantly thought of Roy’s uncontrollable temper and was not impressed. So much for romance.

Things improved from there, though. On another expedition, this time rock-climbing in Titahi Bay, Sheila and Gil went for a traverse on top of a cave while the others ate lunch down below. They weren’t well equipped, “No rope or anything, no ice axes, just sort of walking along”, Sheila remembers. She slipped and Gil saved her by grabbing a handful of hair. “It held,” she says, smiling at me, “lucky it didn’t all come out. It probably would now.” Then he bought her an ice cream.

That’s more like it.

They started going to films together, though Gil’s choice of refreshment didn’t suit Sheila at all. “His idea was never a box of chocolates, it was always jubes, a box of jujubes. Which I didn’t particularly care for, they were sort of gelatinous things with a dusting of crunchy sugar, various flavours.”

Unpleasant lollies or no, they got engaged quite quickly, and were married on the 28th of November, 1950, at St. Andrews Church on Stewart Island. Gil’s proposal might be considered unorthodox by some, because he told Sheila that he might like to get married, but only if she didn’t want “a lot of squalling brats around”. She was taken aback by this, but
understood that he wanted nothing to get in the way of their freedom to climb and explore. When I asked her about it she replied “I hadn't thought of marriage without kids, it sort of followed the night with the day, everyone seemed to do that—you know—have families. And I thought, hmmm I suppose I can find something else to do so I said ok.”

Then I asked if she ever missed being a mother. She shook her head, a bit hesitantly, I thought. “I would probably have drifted into it [given the chance]. I just seemed to have books instead of babies. Thing is, you find something else.”

Other people, presumably her family, were not so understanding. She took a lot of grief for not having children. “Nobody tackled him on the subject but everyone went for me, ‘when are you going to have a family? You're very selfish not having children... blah, blah blah.’ I never felt I had a right of reply, I could never defend myself.”

Being set upon and forced to defend Gil’s beliefs and eccentricities must have been hard for her. Why didn’t she feel she could defend herself? Perhaps because unfairness and arbitrary persecution were part of her upbringing. Fighting back wasn’t allowed, so she became accepting of the mistreatment of others, like her father and those bullies at school. Later, as an adult, it would be all too easy to fall back into that pattern when presented with any injustice. Sheila’s experience with Robert Falla speaks to the same impulse.

Gil had already arranged a mountaineering trip for shortly after the wedding, and Sheila went along on what his climbing companion Andy Anderson joked was “Mr Natusch’s honeymoon”. It did not go well. The first day the three of them tackled Mount Elie de Beaumont, in what is now Mount Cook National Park. This peak, at 3100 metres, looks
positively hair-raising, at least in pictures. “Crampons all the way,” remembers Sheila.

Leaving her behind in the Haast hut, Gil and Andy set off early the next morning to climb Dampier, New Zealand’s third highest peak. Sheila spent the day puttering and worrying, then went up the snowy track to meet them when she thought they would be coming in. After she waited around awhile, and there was no sign, she went back to light the Primus to make tea. Various parties of climbers came and went. Every time she heard the crunch of boots outside she thought it might be Gil and Andy returning, but it wasn’t. Finally, frantic with worry, she began to ask people on their way out to look for her new husband and his partner, and was very disturbed to hear one mutter “we’re probably going on a corpsing trip”.

Everyone knew their path had taken them across the Lindis Glacier, which was notorious for avalanches. Sheila spent a sleepless night. When her new husband and his climbing partner finally arrived the next morning, their faces smeared with the cheap lipstick that they used as snow cream, Gil explained nonchalantly that the ascent had taken longer than they expected so they decided to stay up on the mountain and come back at daylight. What Sheila thought of all this she didn’t tell me, only saying that they were used to going off by themselves without someone’s wife tagging along, so they wouldn’t have thought of the consequences. In any case, they were unharmed. But Sheila, already sunburned and a bit snowblind from their ascent of Elie de Beaumont, ended up with painfully infected gums, which she believes was caused by the stress of her sleepless night spent waiting for the return of Gil and Andy. Feverish and unable to drink or eat, she had to be carried back to the Hermitage Hotel, at the foot of Mount Cook, where a holidaying doctor gave her antibiotic injections. Some honeymoon.

The newly-minted Mr and Mrs Natusch went to live with his parents in Lower Hutt, on Natusch Road. Precipitously crossing the top of a ridge, the road is home to many expensive
houses now, although in those days it would have been mostly solid bush. Although Sheila called her mother-in-law Mum, she found her a bit overbearing. In an interview she describes her as “short and round and very capable and very downright. I'd be pegging out Gilbert's socks on the line and, [she would say] 'Not like that, you do it like this' and my Aunt Etta had had a different method, 'You do it like that.' I seem to have been at the mercy of bossy females as well as rather unsympathetic gents most of my life. Not Gilbert though, he was good.”

The most unsympathetic gent was Roy, of course. But Gilbert, despite her early misgivings, was nothing like him. She described him to me as a: “thickset, nuggetty man, and very handsome.” His hobbies of tramping, mountaineering and bird-watching suited her fine. They shared a mutual love of the outdoors, reading and classical music, which never waned in the fifty-odd years of their marriage. A sober and frugal man, he was the perfect antidote to Roy’s tempestuousness. Although I never met Gil, I have seen plenty of pictures of him. He has an Old World look about him, with his wide face and neat centre-parted hair, and a kind smile. I can see the attraction.

Later, when they could afford it, the newlyweds found their own flat on Webb Street, in
Central Wellington. Sheila didn’t remember the number, so I couldn’t find the house amongst the tall apartment blocks and industrial businesses that line the street now. The flat was oddly laid out as she recalls—“We had a bedroom on one side of a long corridor and a living room and eating room on the other and way along at the end of the passage there was a wash room so we had to take our dishes way along there and wash them. It was very, very basic, but it was ok.”

After her disappointing experience at the Museum, Sheila had taken a job at the Correspondence School. At first she worked in the Country Life department, purely on the basis of having taken Stage One Zoology. Her advanced qualifications in English and French might have been put to better use elsewhere, but no one seems to have considered this. Ever helpful, she took to illustrating other employee’s assignments for them, though there was an “official” illustrator whose toes she was presumably treading on. The process was laborious, as Sheila described to me in an interview—“I’d lay down a sheet of funny metallic stuff, it was sort of aluminium with a strong card-like backing. You had to keep any moisture off these things. [There was] a special fluid and an ordinary nib pen to draw with but you mustn't let any part of your hand touch the surface or it would leave a smudge or a thumb print or something like that. So it was very, very tricky stuff. And I remember having to do a sunflower stem, with all those little cells and along came the head of the room and said 'Oh, that's interesting' and put his great pudgy paw down right in the middle of it!”

None of these illustrations have been preserved, though Sheila said she thought she had one that she was rather proud of; Banquo’s Ghost at the feast, rendered on scratchboard. She promised to send it to me if she could turn it up. So far, she hasn’t.
Her artistic talents were eventually noticed and appreciated, and she was promoted to the Art Room. Not to teach art, which she would have enjoyed, but rather lettering, which was done with a brush and India ink. Most of the boys, she remembers, couldn’t wait to leave school and go to work on the farm. She received quite a few smudged and dirty assignments, and was dismayed by her students’ low level of English comprehension. Many had difficulty with the alphabet, not even knowing upper case from lower, so Sheila took to getting extra notes printed with more instructions for them. News of this reached the Head of Department, who wasn’t pleased, and she was demoted upstairs to the Academic room.

“For trying to help?” I ask her incredulously.

“Yes”, she answered. Just that.

Not at all put off, Sheila continued to write and illustrate lessons, enjoying the contact with her students, since they were not physically in a classroom with her and didn’t have to be disciplined. I’m sure they enjoyed her teaching as well, since she might for example, draw a sheep and a lightning storm to illustrate the difference between “wether” and “weather”. Such imaginative efforts could well have been encouraged, but this was the fifties, a period of deep conservatism in New Zealand.

All this extra writing and illustrating honed Sheila’s skill for simplifying science. Young people, especially those who don’t particularly want to be in school, are an exacting audience. Making lessons that engaged their imaginations would have been the perfect practice for the science communication that Sheila did later. In fact, some of her first books were loosely based on the materials she developed at the Correspondence School for her less
than enthusiastic students.

During this time, while Sheila and Gil were both holding down fulltime jobs, they built Gil’s parents a new house. The old Natusch family home was quite tumble-down, and the neighbours had pressured them to do something about it. (“Mostly me, of course,” remembers Sheila.) They would ride out on their bicycles Friday after work, and spend their precious off time tearing down bits of the old house and pouring concrete for new foundations. Water had to be laboriously carried up from a creek. It took a very long time to finish the new home, while the elder Natusches continued to live there, simply moving into different rooms while the demolition and building continued around them. Even when the kitchen was missing a wall they still sat down to dinner in it, during a freezing southerly, with Sheila’s mother-in-law blithely instructing people to leave their coats on. New Zealanders are made of stronger (and stranger) stuff than me, that’s for sure.

After a couple of years of this gruelling work, it was time for Sheila and Gil to think about their own living arrangements. An ad in the paper, for an early 1930s single story brick cottage on Owhiro Bay, seemed a good for fit both of them—“The sea for me and the mountains for Gil.” It must have been; Sheila has stayed in that same house for the last sixty-five years. Their new home was not without its problems, however. On their first trip to the attic, they wondered why there were chunks of concrete lying about on the floor. After removing them, the answer poured down from above. The ceiling leaked, badly, leading to the presence of toadstools growing on the threadbare carpet in the living room. “Mushrooms wouldn’t have been so bad, but toadstools…” recalls Sheila, with a shrug. Clinging halfway up a sea side bluff, the house boasted sweeping views of Owhiro Bay and the mountains beyond. But it could only be reached by climbing a flight of sixty-odd steep steps. In later
years Sheila and Gil added a cable car, a common sight on the bush clad hills of Wellington. Not to me though, I’d never seen one before I visited Sheila in 2012 for the first time. It is a sort of moulded plastic bin, with two seats, pulled by a heavy steel cable which runs up a track. I get an unaccountable thrill from its dignified procession up the slope, as though I am a fairy tale princess in a floating carriage. Gil would no doubt have appreciated the feat of engineering it took to build it. Sheila keeps odds and ends of shells and driftwood that she finds on the beach on one of the seats now, and last time I visited I added some jewels of coloured sea glass that had been tumbled smooth by the waves of Owhiro Bay.

The house has been added on to several times, including an upstairs lounge, built in 1969, and the addition of what Sheila and Gil called the “stack house”, a separate building meant to house books and papers, which had threatened to overwhelm their living areas.

Eventually the stack house filled up as well. Stuff like that tends to expand until it engulfs all usable space. Christine Dann (the producer of the film *No Ordinary Sheila*) and I spent a couple of afternoons sorting through the contents, which was arranged not only on shelves, but boxes, bags and teetering stacks. We found receipts and reports, programs and party invitations, articles and abstracts, magazines and mouse droppings. It would have been like archaeological work, except there was no stratigraphy to these artefacts. They were all jumbled together, from the late eighteenth century (old Natusch family papers) to the present day, which made for fascinating and dusty work. Sheila watched us, offering up memories and comments while keeping a sharp eye on what we decided might be ready for the trash bin. Treasures eventually appeared, freed from the bottom reaches of corners and boxes. A hand-carved mah-jongg set belonging to her mother Dorothy, an early sketchbook of Sheila’s, some correspondence with the late historian Michael King. All this we carefully filed in the
recently emptied boxes, and carted three heavy bags of yellowed and rodent-shredded papers
to the tip as well. But we saved many envelopes, pictures and cards for Sheila. She has a
charming habit of decorating second hand envelopes for re-use, and any missive from Sheila
is unmistakeable in this regard. I’ve received plenty, and I’ve saved them all. Someday, when
I have finished this book, they will find a home in the Hocken Library.

Although they had acquired a house in a distant suburb, Sheila and Gil did not have a car.
They never bought one, even when later on, they certainly could have afforded it. Trips to
town were made on bicycle, Shanks’ pony (walking) and by tram bus. The old Ministry of
Works, located close to the present Parliamentary building, would have been close to a
twenty kilometre round trip. No wonder they both stayed so fit!

Meanwhile, Sheila’s situation at the Correspondence School went from bad to worse, though
she had been there nearly four years and written and illustrated hundreds of lessons. Rebuked
for staying late to finish an assignment with a co-worker, (“Haven’t you two got homes to go
to?”) she decided she no longer wanted to put up with the aggravation of working for other
people. Writing and illustrating her own books from her new home, with its panoramic views
of the sea and mountains, seemed infinitely preferable. She walked away, never looking back,
and launched her career as a free-lancer with *Native Plants of New Zealand*.

Gil fully supported this ambition. Once they had finished the house improvements, he and
Sheila spent time tramping and mountaineering, with her sketchbook always at the ready to
capture botanical specimens. In April, 1958, Sheila and Gil set off on an Easter holiday cycle
tour, beginning at the top of the South Island and ending in Invercargill. They crossed over
the Haast Pass, pushing or riding their heavy three-gear bicycles, traveling through terrain
that had not yet been tamed by civilization or even rudimentary roads. I have a picture from this journey, of Sheila standing next to her bicycle in a bleak grey landscape, at the summit of the Crown Range between Wanaka and Lake Wakatipu. Her “pack”, which was nothing more than a burlap bag, is tied to the back of her bicycle with twine.

![Figure 9 Sheila Natusch at the summit of the Crown Range (1958)](image)

I am impressed, once again, with Sheila’s toughness and resolve.

But her early life with Gil wasn’t always such a challenge. Their affection for each other meant that they took far fewer chances with precipitous and dangerous destinations, which
had to be a good thing, in my book. There were picnics down on the bay, and cold, bright evenings together on a blanket, watching the stars wheel overhead.

Sheila had her writing and Gil his engineering. It sounded like bliss. She had certainly earned it.

My research into Sheila’s working life yielded some important clues to her success as a writer. She had found she couldn’t work for other people without friction. Correspondence School, though it seemed like a good fit initially, became more of the same. But it did allow her to practice her skills in writing for science communication, and that was something she could take forward into the next stage of her life. Would she succeed as an independent author? I turned to her books to find out.
Chapter Six—Sheila’s Children

I considered calling this chapter “The Wonder Years” as in *I wonder what I am going to write about now?* As Sheila said, people get married and have children, kind of like day follows night. Or night follows day, depending on how poorly behaved the children turn out to be, I suppose. I have four (not poorly behaved, for the most part) and I can’t imagine my life without them. They do take up a lot of time though. Sheila has always assured me that her life has been very full, even with the absence of children. I think it is fair to say that the books she wrote became her offspring, loved and fussed over, then sent into the world with the same fear and pride as any mother would experience. She has been a particularly prolific parent. Sheila has written books on natural history, her ancestors, the story of her father’s life, local histories about Stewart Island and Southland, even a volume on missionaries in the Chathams. Her illustrations have graced the pages of other people’s works, and she maintained a long and fruitful relationship with the *Listener* magazine. No matter the subject, her writing remained engagingly informal and almost chatty, with beautifully rendered descriptive passages that delight and create the impulse to learn more. It’s no wonder that she has become such a respected communicator of science.

I asked her once about her writing process and she replied in a letter:

> Writing process? I haven’t got one… I’ve never suffered from writer’s block, just housewife’s block. And I’ve never set myself goals of so many words a day. It’s more like someone’s advice [the King] to Alice in Wonderland, ‘begin at the beginning, and go on until you get to the end and then stop.’
When I visited the Turnbull Library, in Wellington, I saw one of her early layouts for *Out of Our Tree*, a book on early Traill family genealogy. Sheila, who has never owned a computer, did the writing on a Brother word processor, which is something like a typewriter with a small screen for editing. Each page is a carefully composed collage of snippets of writing, cut out by hand, with added drawings and photographs held down with a special kind of white tape which does not show up when the paper is copied. An extraordinarily low-tech process, but one which produces serviceable results. She could have let others do the arranging on Adobe PageMaker, or some other software program, but that is not her style. Sheila likes to have complete control of the process, so a finished book requires a great deal more work than “begin at the beginning…” might suggest. I wonder if she ever felt like throwing in the towel and doing it the easy way?

Or perhaps that’s just my experience. I’ve written books too, and my method is a lot of procrastination, intense feelings of guilt, incredible bouts of overwork and then more guilt and self-recrimination when things aren’t as good as I think they should be. I could learn a lot from Sheila’s non-process.

The writing credit for her first book was shared with Neville Seaward, but it was not a collaboration, as such. Seaward had written a book on Stewart Island; a slender travel guide, published as part of a series by Pegasus Books in Christchurch. Pegasus decided to update and re-issue the *Stewart Island* guide, and needed someone with in-depth knowledge of the island to help. Sheila fit the bill nicely. She added information on the back country tracks and natural history, and provided many illustrations and a hand drawn map for the centrefold, approximately twenty pages of extra material. For this she was eventually given a co-writer.
credit (but not until the 1962 edition), and more importantly, it opened the door for the publication of her second book, which was her first as a solo author. She sent it along with the finished draft of *Stewart Island* and Pegasus agreed to publish it as well.

This second book was hardly bigger than a pamphlet, but contains much information of use to the amateur botanist. *Native Plants: An Introduction to the Plant Life of New Zealand* was produced with some of the materials that Sheila had imaginatively created for her students at the Correspondence School.

Next came *Native Rock*, which was turned down by Pegasus publisher Robin Muir on the grounds it was “too big a subject for a little book like that”. Sheila acknowledges this in her introduction:

Great geological variety is packed into the small area of New Zealand. Though there is more in any one district than would fit into a book twice as heavy as a geologist’s collecting-kit, this lightweight account may be useful for sketching in some of the main outlines of the whole picture.

Sheila, who is very aware of the fact that more is not always better, especially when it comes to books that people might want to carry round and consult, eventually found a publisher who was happy to comply with her vision. *Native Rock* was published by AH Reed in 1959 and remains available through Nest Egg Books, Sheila’s own imprint. In addition to native geology, it also contains materials on commonly found fossils, and is illustrated with many black and white drawings by the author. This book, unlike many of her later volumes,
contains no personal information or experiences, though she doesn’t shy away from a
trenchant comment or two in the section entitled “Man in New Zealand”:

Man-effected alterations to the earth’s surface, carried out rashly and without careful
planning and forethought, are likely to bring much costly trouble before balance is
regained; in the case of New Zealand, we hear much wisdom-after-the-event from
those who now know better than the pioneers. The present geological surface, with its
original plant cover either cleared off and replaced by pasture and pine, or modified
by introduced animals, and with erosion by no means in control in steep cleared areas,
is reasonably ‘settled’ and useful; but it is not quite the scene that Cook and Tasman
found, nor do many of us now wake to choruses of native birdsong.

I wonder how Gil would have felt about that gentle criticism? In his job with the Ministry of
Works, he was responsible for locating and designing hydro power facilities, and was very
involved in siting the Clyde Dam. Dams make a big impact on the landscape, after all, and
the Clyde dam was not well-received by the locals. In an interview with Kim Hill on National
Radio, Sheila recalls:

He [Gilbert] used to say ‘I can go and look at a place and see whether it is a feasible
place to build a dam, then I leave everyone else to argue the toss.’ They weren’t
supposed to stick up for themselves, the Ministry of Works. He just took it all.

After these early successes, Sheila decided to tackle a much broader subject in a book she had
“needed myself for many years. Other people have told me they needed it too, all ages of
people, but with one thing in common—a keen observant eye for living creatures.” Animals
of New Zealand, published in 1967 by Whitcombe and Tombs, is Sheila’s best known work and the one that made her reputation as a first-class science communicator. A sweeping survey of everything from one-celled creatures to whales, *Animals of New Zealand* was illustrated entirely by Sheila, usually working from live (or at least recently deceased) specimens. Many she collected herself, receiving the occasional bite for her trouble, and restrained her subjects just long enough for a sketch before letting them go again. Drawing an animal from life, as Sheila says in the preface, means “giving a quick impression of movement, attitude or character, rather than fussing too much over detail.” One exasperated editor, on viewing her illustration of a shore bird, whisking busily towards the edge of the frame, remarked “Is that bird with us or not?” But detail belongs in diagrams from dry textbooks, and *Animals of New Zealand* is anything but dry. A crab is described as a “frisky fighter”, a mole-cricket looks “not unlike a front-end loader”, hunter wasps have a “dash of Mephistopheles”. Nor is she afraid to add personal opinion to her description, as evidenced here:

A view of fur seals, galumphing over the rocks and tumbling into the surf—in which they transform themselves into shining creatures that would grace the pages of Vogue—always leaves me with the feeling that sealskin coats best become seals.

I wholeheartedly agree.

The illustrations alone look like a lifetime’s worth of work, everything from carefully rendered diagrams to winsome colour and ink washes. There are 120 full page figures, plus eight colour plates covering everything from sponges to parakeets, and a host of other
“decorations” as Sheila calls them. It is a magnum opus of a book, and one that an author could be intensely proud of, even if she hadn’t gone on to write so many other valuable and entertaining works.

One reviewer, writing in the December, 1967 edition of *Tuatara* said:

Another thing I like about the book is that the zoology does not come out in large indigestible hunks, rolled in choking terminology and all served up cold in a constipated style of writing. Right throughout there is an enchanting use of the best seasoning and aperitifs one can obtain—personal experience and anecdote, which make the subject matter incomparably more appealing that much of the scientific writing one has to stomach.

Another reviewer, writing for the *Christchurch Press* in August 1968:

The reader has in this book the work of a person keenly observant of living creatures, whose curiosity has led her to exhaustive study about them. The method is to deal with animals in their family groups, to give a brief description of each species, and to suggest further reading. Thus, a book chiefly designed for schools and the general public is both greatly informative in itself and an introduction to specialised study.

High praise indeed.

The book took up a great deal of her time, and she recognizes this in the acknowledgments:
Finally I must warmly commend my husband’s polite acceptance of a hobby that has often made chaos of the household timetable: meals have been late, and often based on paua as a main dish. (We have not yet tackled huhu grub.)

Polite acceptance? Hobby? We might call this damning with faint praise. Yet in all my conversations with Sheila, she has never said a cross word about Gilbert. He supported her while she got on with her writing work from home, while apparently putting up with a certain amount of domestic disorder.

Were there problems in their relationship? Undoubtedly. The National Radio presenter Kim Hill, in an interview from 2007, says to Sheila “You and your husband Gilbert had in many ways a very unusual life…”

Sheila interrupts quickly and firmly, “We had a good life.”

Kim, not to be put off, starts again. “You had a good life and an unusual life, in that it is described as being without cars, television, alcohol, cigarettes or shag pile carpet. What were you thinking? Was it austere?”

Sheila, after a digression about carpets and toadstools, replies, quoting her father. “I suppose it was. But you can make almost any camp comfortable!” I had to laugh at this, as many of Roy’s camps were anything but, according to Nancy Schofield. Sheila went on to explain that
they had no interest in television, it was often “raucous” (a point on which she and I agree) and although they had saved up for a car at one point, they spent the money on their first overseas trip instead. All well and good. But Gilbert was a self-styled economic conservationist, so his frugality was more than choosing one thing over another. Kim asked how this manifested itself in their life together. Sheila answered, “I had to ask for money if I wanted to spend any.”

“Did you mind?”

Sheila, keeping her voice light, replied, “Yes, I did, rather. But I got used to it. I’m the fairly adaptable type.” She was quick to agree with Kim that it wasn’t due to any sinister patriarchal impulse on his part, but because he’d been raised frugally by parents who had been hard-working but impoverished all the same. They grew their own vegetables and walked everywhere, or took the train. They had tank water, so Gilbert grew up conserving it. Later, although his house in Owhiro Bay had access to a plentiful supply, he insisted that a weekly bath was enough to keep anyone clean.

Kim asked Sheila if she had any regrets about their frugal life. “Did you ever want to buy a Gucci handbag or eat a seven-course meal?”

Sheila was firm in her reply. No. She likes small amounts of everything and she lived (and still lives) well.
Gil’s frugality was something she learned to manage, and it did have one important benefit. His savings and investments allow her to continue in the life she has always enjoyed, without worrying about money. A loving legacy, and not one to be taken lightly. In some ways, Gil was well ahead of the social curve, valuing simplicity long before it became fashionable. But I can still imagine that the day to day observance of his economic conservationism must have been quite trying.

Their disagreements tended to be on trivialities. Sheila reminisced in one of our interviews—“I remember he had no time whatever for modern art or modern versification. I used to say, “Well, I like the old Masters but I think there is something to be said for keeping an open mind and treating people like Picasso as a crossword puzzle, you look for the clues and work out what they're all about.” [Gilbert would say,] “Oh, what nonsense.” You know, we would spar away like that. Nothing very serious. On the whole, we saw eye to eye.”

This except from Wild Fare for Wilderness Foragers, published in 1979, gives us some insight into Sheila’s priorities as a home maker:

I never measure anything, nor do I use a book when preparing food for human consumption. Imagination and common sense and whatever is in the house at the time are thrown into the crucible; and I never know whether friends come back in spite of the food or because of the company. I do know I am better company if I have not worked myself into a state attempting a spotless house and a complex menu in the one day, and that nearly all the things they tell you to do in books, like simmering things for hours in double-boilers can be short-circuited to my satisfaction and everyone else’s—provided I can operate alone in the kitchen.
In cooking and housework, just like in her writing, Sheila would have it done her way.

In addition to all her writing and research work during the sixties, Sheila was busy with another, quite ground-breaking activity. The Southland branch of the Royal Society of New Zealand asked her to become their representative on the National Council. A great honour, since there have been only seven women in total on the council during its first hundred years, and only one arts and humanities graduate—Sheila Natusch. But it was a practical idea as well. Having Sheila in residence in Wellington meant that the Southland members could be kept up to date with the latest developments of the Society, without having to cross Cook Strait themselves. She remembers it as “being daunting, at first” to find herself in such an august body, amongst men who were her scientific heroes.

Sheila noted in So Far So Good that she was:

A small person with a small voice, soon drowned out by stronger masculine utterances. When I wanted to say something, I had to build myself up to coming out with it, only to subside unnoticed. So I took to writing memos to the new young president, putting the case for small groups eager to learn about science, though they could not be considered scientists.

The Southland branch often found itself in trouble for late payment of its subscription, and Sheila had to send memos to them too, trying to impress upon her colleagues how close they were to being removed from the ranks. Eventually the Southern group did wither away, and Sheila joined the Wellington branch instead. When the Society celebrated its one hundredth
anniversary in 1967, she was invited to join the academic march as a former council member. Decidedly an honour, but not without its impediments. She had to hurriedly hire academic robes, as well as find a long dress to wear. Her last such formal garment had been made into a throw pillow, so rather than buy a new one she unpicked all the stitching, boiled it to even out the faded bits and then sewed up all the cat claw and burn holes. (One wonders if Gil’s economic conservationism was at work here.) Thus attired, she presented herself for the festivities at the Town Hall “thumping migraine and all”.

You could gather, from a Listener article that Sheila wrote for the centennial, that she wasn’t entirely happy with the direction that the Society was taking. She bemoans the tack of excluding citizen-scientists (of whom she has always numbered herself) in order to project the veneer of professionalism. She writes:

The amateur member, in his happy amateur way, went on looking at stars and turning over stones, unaware of the national and international job his Society now felt called upon to do, and that he was perhaps holding it back. Lack of authority and status implied in criticisms of the Society by other scientific bodies had become a touchy point among some of the members.

Touchy indeed. When Sheila offered to donate funds from an article on the history of the RSNZ towards the construction of a new building to house the Society, it was politely declined. She describes her experience in So Far So Good:

In the end the society reconstituted itself into a Council of Fellows and what I called member bodies’ committee of fellers. When funds were to be raised for a home in
keeping with societal status, I offered the president earnings from an article I wanted to write about RSNZ. The original Royal Society (set up in the time of the Merry Monarch) had favoured plain language. Being in sympathy with Old Norse terseness of telling, I disliked circumlocution. When the draft of the new constitution had it that papers “were to be caused to be forwarded” somewhere, I wondered why they couldn’t just be sent. The draftsman had done more Latin than I had, so it was small wonder we found ourselves agreeing to disagree. I felt if the writing was on the wall it should at least be comprehensible.

Sheila’s next book was another nature guide for Pegasus Press: *A Bunch of Wild Orchids*. Beautifully illustrated with delicate pen and ink and watercolour washes, it continues her trademark light touch with scientific subjects. Other books could discuss the taxonomy and growing habits of New Zealand orchids, but only Sheila could tie them so poignantly to childhood memory:

Further up on the same bank grew curious, long-stemmed stout-budded plants which, according to the grown-ups (who knew about everything), were Orchids. The word was rather mixed up in my mind with “awkward”, a thing I was inclined to be; and the first time I saw it printed I supposed they meant orchids [orchards] like the one at Ringaringa where we climbed trees and munched green codlins [small unripe apples]. But by the time I was ready for high school on the mainland I had an orchid garden of my own.
She uses her brilliant powers of description to good effect, describing the flowers of *Microtis* as "Victorian ladies in bonnet and cloak" and the purplish brown *Prasophyllum* as "tiny quacking ducks".

This book also features a passage which very neatly encapsulates Sheila’s approach to environmentalism and human-wrought change to the landscape:

> Not that these plants, or others like them, don’t grow in other parts of New Zealand. They do. But where I lived as a child they came so readily to hand. Where there are people there have to be motorways and railway lines and power stations and towns, and it’s no good making a fuss about it unless we mean to go without easy transport and heat and light and comfort, but on Stewart Island there are not many people, there is nowhere to put motorways or power schemes, and a great deal of the Island is set aside for “for the preservation of native fauna and flora” – including orchids.

A shrewd and practical mix of protection and progress, much like Sheila herself. We spent a great deal of time over the course of our interviews discussing conservation. Sheila is a believer in practical efforts to preserve the New Zealand landscape and fauna, but does not believe in “getting carried away”. I asked her about the campaign by Gareth Morgan (the New Zealand businessman and philanthropist) to eradicate cats from the mainland. She shook her head, saying, “The rats and mice would have a lovely time then, wouldn’t they?” We also agreed on the dangers of unrestrained use of 1080 (sodium fluoroacetate) by the Department of Conservation to poison large swathes of back country New Zealand. She sums up her philosophy like this—“I say about conservation, think very hard before you act.”
Sheila’s last book of the sixties represented a change of pace from her science writing. *Brother Wohlers*, published in 1969 by Pegasus Press, was a biography of her great-grandfather Johann Friedrich Heinrich Wolhers. A missionary on Ruapuke, originally from northern Germany, Wolhers ministered to a motley flock of sealers, whalers and locals. Feeling his story was well-worth telling, Sheila secured a grant from the New Zealand Literary Fund, and set about teaching herself to read German, so she could delve into her ancestor’s journals and papers. The Johann Wolhers who emerges from these pages is a kind, but rather impractical man, who passionately cares for the salvation of his flock. Leaving the relative comfort of Nelson in the early 1840s, he travels ever southward searching for souls who need saving, having found the city dwellers well-cared for by the Presbyterian and Anglican missionaries who had already defined their turf.

The book deals not only with Wohler’s life, but the history and folkways of the Maori and *pakeha* who befriended him during his forty-year tenure as a missionary on Ruapuke. It is a poignant account of his life amongst these peoples, whom he cared for with a tolerance and gentleness almost unheard of in 19th century missionary work.

*Brother Wohlers* won the Hubert Church award in 1969, the year of its first publication. The prize, established in 1945, is awarded yearly by the New Zealand Society of Authors (PEN), to recognize the best prose in any genre.

As the sixties drew to a close Sheila could look back on the decade with pride. She had written a seminal book of science communication, *Animals of New Zealand*, proving to
herself and her high school detractors that she could indeed be a successful author and illustrator. Her relationship with Gil remained strong and a comfort to them both. The next decade would see her delve deeper into historical research, writing and travel, both within New Zealand and overseas.

My reading of Sheila’s early works has given me more insights into her success as a writer and illustrator. She had begun with forays into botany, geology and zoology, no doubt following the old adage “write what you know”. But these were no ordinary guide books. They were full of personal stories and charming illustrations, mixed with hard scientific facts. Then writing *Brother Wohlers* allowed Sheila to engage in research on the history of Stewart Island and her own ancestry, both subjects about which she is passionate.

I have found another clue in my search to parse Sheila Natusch’s successful career as an author and illustrator—her writing on subjects that were aligned with her own interests had produced some of her most critically admired and well-written books—books that radiate enthusiasm and the joy of learning.

But as she was soon to find out, writing things at the behest of others did not always yield such good results and could be very stressful indeed.
Chapter Seven—New Horizons

The Chatham Islands beckoned in 1972 ("take your gumboots", said brother Alex) so Sheila and Gil, suitably equipped, took the long plane flight from Christchurch airport on a Bristol Freighter. She describes their arrival in the introduction to *Hell and High Water: A German Occupation of the Chatham Islands 1843-1910*:

> Nothing to look at but the changing patterns of pinpoint seas breaking far below. It is easy to believe in eternity while flying or sailing over an endless sea. But it did end: suddenly rocks ahoy and land below: dazzling surf on broken reefs and empty sands; emerald water running into narrow bays; a great lagoon; grey-brown flats; bright green paddocks; trim rows of *very* bright-green, white boled trees – and down we bounced, scattering long tailed lambs and their flouncy-bustled mammas, on to a bright green lawn.

The Chatham Islands are an archipelago about 840 kilometres east of Christchurch, New Zealand, consisting of two largish islands, Chatham and Pitt, and eight smaller ones. First settled by the peaceful Moriori, who journeyed over from mainland New Zealand around 1500 CE, the islands were later claimed by Great Britain and became a base for sealing and whaling. The tragedy of the Maori invasions of 1835 is well-documented, and led to the practical extinction of all full-blooded Moriori.

Sheila and Gil bucketed about Chatham Island by Land Rover, over peaty roads, visiting the famed dendroglyhps (tree carvings) of the Moriori, and the settlement of Kaingaroa. A voyage to Pitt Island yielded an artefact that perhaps belonged to a Moriori, and though she
feared no *tapu* (sacred restriction), she remarked sadly, “the gentle Moriori relic haunts me only with sorrow for what is gone.”

She was entranced by both the botany and geology of the islands, and spent much time sketching specimens. The Chathams felt quite like home to Sheila, not so much akin to Stewart Island as to the Orkneys, where her people had come from originally. An isolated tumbledown stone cottage also caught her attention. Built in 1870 to house Moravian missionaries, it was at the time of her visit a shepherd’s hut. (It has since been restored and is open to visitors.) Sheila did some sketches and later, back on the mainland, some research into this remote homestead, discovering that it had been home to five Moravian mission brothers—Franz Shirmeister, David Müller, Oskar Beyer, Heinrich Bauke and J. G. Engst, who had sailed from Bremerhaven on the whaleship *Juliane*.

In 1975, Gilbert, who had been with the Ministry of Works since 1949, qualified for long-service leave. This institution, unique to Australia and New Zealand, provides paid leave for employees when they reach an agreed-upon employment milestone—in Gil’s case twenty-five years. He was asked by the Ministry to visit Europe and study the siltation of high-level dams in the mountains. There was only one problem, Gilbert wanted Sheila to come too, but the Ministry seemed to think that wives were best left behind. They compromised in the end by saying that the pair could travel together as long as they managed to stay under the budget that had been set for Gil alone. This turned out to be easy, as the frugal Mr and Mrs Natusch had been making do with very little for years and years.
Sheila wasn’t at first too keen to tag along, but when she thought about the locations that such dams could be found (alpine scenery!) she quickly changed her mind. So the money they had been saving for a car was put to use for travel instead, and they visited England, Scotland, France, Germany, Italy, Iceland and Switzerland. Gil checked out the dams, while Sheila revelled in the mountain air, looked up old relations and made a host of new friends. They had such a good time they resolved to go back, and did, in 1983. Some of the genealogical material Sheila collected on their visit to the Orkney Islands went on to feature in Out of Our Tree, a slim volume with many photos and illustrations which was first published in 2001 by Nestegg Books. Sheila also used her time, profitably, to do more research on the Chatham Island missionaires in Berlin.

After their return from Europe, Sheila began another historical work. On the Edge of the Bush: Women in Early Southland had been commissioned by the Southland Branch of the International Women’s Year of New Zealand before she left for Europe. The IWY was mandated by the United Nations as part of the Decade for Women, from 1976-1986. The book represented, as Sheila says in the introduction, “six months’ hard labour” made only a little easier by the steering sub-committee’s efforts to amass the raw materials for research in 1975. “Tackling the great pile of life stories collected by my helpers took steady nerves and hard thought,” she continues. Questions abounded. “Where should the tale begin, and where would it end? Should it be put in alphabetical order like a telephone book?”

Sheila did not take such a clinical approach. After a lot of “staring and sorting” she fashioned a tale, liberally illustrated with pictures and a few of her own illustrations, which encapsulates the triumphs and tragedies of these early women pioneers. Nor does she limit her story to
European women alone. The book begins with the earliest female pioneers, the Southern Maori waihine.

*On the Edge of the Bush* has a somewhat breathless quality to it, leaving the reader to wish Sheila might have had a bit more time to write it, or perhaps fewer sources. But it remains useful because it treats well a topic seldom explored. History is written by the victors, so Churchill is reported to have said, and women are hardly ever represented in those ranks. So too is history most often concerned with war and conflict (the exciting stuff!), not the day to day existence of ordinary women, facing hardship with grace and grit. Sheila, as a women and competent historian, provided us a window into those lives. Not without a toll, however—

It is no use pretending that this book has not cost some sleepless nights; better spent at the typewriter, I found, than dithering in the dark about what people might want of me and what I was able to give and whether they were the same thing.

Sheila had found, once again, that working for others did not make her happy, nor did it produce her best work. Her next project might well have suffered the same fate, since it was also written “by request”. Sheila dusted off her research on the Chatham Island missionaries and began work on *Hell and High Water*, which was published in 1977 by Pegasus Books. Alison Somes, Heinrich Bauke’s great-granddaughter, had asked her to write the history of Bauke and his companions. As Sheila says in the introduction:

My earlier book, *Brother Wohlers*, perhaps confirmed her in the impression that German missionaries were a specialty of mine.
This book, however, would not be the chore that *On the Edge of the Bush* turned out to be. Sheila was fascinated with the flora, fauna and geography of the Chathams, and couldn’t wait to find out more. The book certainly reflects this.

As a descendant of missionary stock herself, Sheila found the history of those five brothers who attempted to tame the Chathams both familiar and somewhat disconcerting. Her own ancestor, Wohlers, had been a gentle and kind soul, careful to treat his flock with understanding and Christian love. One gets a completely different picture of the Moravians. They charged forth heedlessly, both overestimating the need for their version of Christianity and underestimating the cultural differences between themselves and the local Maori tribespeople.

The schoolmaster, Shirmeister, is quoted in the book describing the Maori as “a lazy lot, lying in the sun or by the fire all day long, stuffing themselves with food, and doing just whatever they like…warlike in nature, full of tricks and guile.” Müller gets off more lightly. He was a man “dearly loved by all” but died of congestive heart failure not long after the mission was established. Engst was exceptionally callous and cruel, beating a tied up child almost to death and visiting a young girl with attentions “unbefitting a celibate”. Bauck beat his own children mercilessly and once struck and locked up Müller’s wife for disobedience. Beyer, although not as violent as some of the others, was more interested in temporal than heavenly matters, trading in horses, potatoes and possibly even rum. All in all, the book is an eye-opening and somewhat disturbing look at mission life in the 19th century, with a generous helping of Maori and Moriori history and reminiscences of the men’s descendants.
Sheila’s next book was the serendipitous result of some sleuthing she did in 1974-75, in the dusty stacks of the Hocken Library in Dunedin, where she had seen a journal of a voyage made by the steamship *Acheron*, from 1848. The journal was incomplete, ending in mid-sentence on page 115. No one knew what had happened to the rest of it, or even who the author was. Though it was commonly attributed to John Lort Stokes, captain of the vessel, some of the passages mentioned him in third person, leading Sheila to believe there must have been another person on board tasked with keeping a journal of the voyage. Through hard work, some educated guesses and luck, Sheila finally tracked down the real author, George Hansard, who had been a clerk on the expedition. This led her eventually to an uncatalogued microfilm from the Greenwich, England National Maritime Museum, where she found the rest of the Hocken manuscript (“flowing on without a break”, she writes enthusiastically in the preface. “One part of the original in Greenwich and the other in Dunedin!”) With the two accounts reunited, Sheila began her book on the cruise of the steamship *Acheron*.

Stokes, the Captain, who had sailed with Darwin on the *Beagle*, set out in January, 1848 with one hundred men to undertake “a full and accurate Survey of the Northern, Middle and Southern Coasts and harbours of New Zealand.” The book follows their travels from Plymouth with stops in Madeira, Rio de Janeiro, Cape Town and then, after thirty-six days at sea, the coast of Australia, where they re-provisioned in the tiny settlement of Albany. After a three month stay in Sydney, due to easterly winds, the *Acheron* finally reached Auckland in October, 1848. They were not long in port before the governor, Sir George Grey, asked Stokes to hurry along the coast to Wellington, which had suffered tremendous damage from a shallow earthquake centred in the Marlborough Sounds. From there the *Acheron* continued round the coast, mapping and taking soundings for the next three years.
Sheila’s account, drawing heavily on Hansard’s writings and supplemented with letters, scholarly accounts and various notebooks, is an engaging travelogue of the Acheron’s adventures, filled with local colour and history. Published in 1978 in a handsome hardcover edition by Whitcoulls, the book is filled with period-appropriate illustrations and maps, and contains some of Sheila’s best writing. Her own ancestor, J F H Wohlers, rates a mention as the recipient of largesse from the crew of the Acheron, who found blankets and other supplies to comfort the missionary and his family after their house burned to the ground.

The Cruise of the Acheron was nominated for a New Zealand Book Award, but “damned with faint praise by the presiding judge and remaindered [by Whitcoull’s] shortly afterward” Sheila reports in So Far So Good. It’s difficult to see why the book was not more successful. It’s well written and illustrated, and the subject matter is interesting enough. The story of how the book came to be written doesn’t get much attention, and that may be to its detriment. Sheila’s detective work could have added an interesting fillip to the historical nature of the book, but it isn’t her style to brag about her accomplishments.

The hard work she put into The Cruise of Acheron hadn’t paid off, so Sheila turned to other subjects. She developed a talent for “finding books” in her adventures, writing them up when she returned home, with illustrations from the sketchbook she always carried with her overseas. A Fortnight in Iceland, self-published in 1979, is a slender book, only nineteen pages, but full of hand drawn illustrations and Sheila’s usual wit and scientific curiosity. Round the World in ’83 continues this trend, cataloguing another trip to Europe after Gil retired.
With the seventies drawing to a close, Sheila and Gilbert were still happily ensconced in their comfortable cliff-side house in Wellington. Although she was now fifty-four and Gilbert sixty-three they both remained in good health, and devoted to one another. But there were dark clouds just beyond the horizon which would bring profound changes to their personal and professional lives, just as surely as the waves rose and fell on the gleaming shore of Owhiro Bay.

How would these difficulties affect Sheila’s writing career? She has weathered storms with unsympathetic employers and publishers already, but the coming decade will bring events that strike at the centre of everything she holds dear in life. The interviews we have that deal with this period are difficult for her—she is always determined to see the bright side, despite events to the contrary, but I can see the heartache in smiles that don’t quite reach her eyes.
Chapter Eight—Threatening Seas

The decade began promisingly enough, with the publication of yet another book, this one for children. *Pop Kelp and Koha Bags* is a small paperback, aimed at a younger audience, but still full of science communication of the best kind, so subtle that the reader does not know they are learning while they enjoy the exuberant text and pictures. It even includes a recipe for seaweed pudding!

But not all was well on the publishing front. Sheila had been a long time contributor to the *Listener* magazine in the sixties and seventies, even having her own column, called “In My View”. They published her stories and book reviews almost without exception, and she proudly collected many of the articles in a scrapbook that she shared with me. A letter taped on the back cover, cruel in its briefness, tells the story of the end of their relationship:

> Dear Sheila Natusch,
>
> Thank you for the piece “Playing with Flames”. It was read with interest, but I am afraid we will not be placing it in the *Listener*.

It was signed by the new editor, Peter Stewart, who had no relationship with her and took pains to make sure she knew it by using an offhand greeting usually found on form letters. He gave no reasons why the piece wouldn’t be considered, which only added to the coldness of the response. Underneath his reply Sheila wrote in bold, yellow script “Is this the end?” Later she added a Nestegg address sticker and the words “Seems it was. They don’t need me, nor I them.”

As her relationship with the *Listener* came to an end in 1982, Sheila began to chafe at the constraints of editing and editors in general. They wanted to change things, make the
language more technical, suck all the life from her words and pictures. How much better to publish things on your own and have to please no one but yourself! The editor of Freelance magazine gave her the idea to go solo—he suggested an outfit in Auckland prepared to do limited printings for a price. But her first efforts were trying in the extreme, as she describes in one of our interviews—“Oh yes, it was a terrible business. I had to alter anything that needed altering on my word processor, [they] would look at it through some kind of viewer and all the mistakes that I had corrected would sort of jump back again and [they] would send this thing back to me. It was a terrible performance. And I've sort of put it out of my mind as one of those things I would rather not remember, I think. But anyway, later I found there was a place in Christchurch that did small print runs and then I found out about Pivotal in Wellington and after that I was away laughing, no bother.”

Sheila does not remember which book was the first to be self-published, but my research indicates it was likely A Fortnight in Iceland, as the WorldCat entry lists Sheila Natusch as the publisher, but not Nestegg Press. That entity came into being a bit later, with the publication of a two volume version of Animals of New Zealand, which Whitcombe and Tombs had allowed to go out of print. Sheila wisely recognized that just because a publisher, hewing to some profit-driven bottom line, had no more use for her books, it didn’t mean that there wasn’t still a place for them in bookstores and library shelves. In this endeavour she was well ahead of her peers—self-publishing decades before modern software and the Internet made it easy. As the rights to her published books became available, either through remaindering or, in the case of Pegasus Books, the folding of the company, she made new paperback editions, often updated and with thoughtful new introductions and illustrations. Later works often went straight to Nestegg Press. She has created a viable and satisfying sunset career this way, keeping small stacks of her books at home, and mailing them out to
libraries and individuals who want them. As she says in *So Far So Good*, she does receive some support for her efforts:

The annual library shelf fee from Creative New Zealand enables Nestegg to keep my books updated and reprinted a few at a time, and within a few days … These and other books are of course available also from Nestegg Press, which can be reached by letter or ‘phone’.

Sheila is the *only* author I know who allows her home address and telephone number to go out in every book she writes! As her own literary agent she has done a very good job of keeping her work in the public eye, and a quick sweep of library websites shows that her books are indeed still on shelves throughout New Zealand, as well as being available through Trade Me and used book shops.

Once, in Oamaru old town, I visited a lovely old shop called Slightly Foxed. Inside were shelves and shelves of books, fiction and non, arranged by subject. The proprietor, a woman in dark and sober Victorian dress, stood behind a wooden counter complete with an old-fashioned ornate brass cash register. I asked her if she had ever heard of Sheila Natusch. She nodded and led me to the New Zealand Authors section, where there were four copies of books by Sheila, all in good condition and reasonably priced. I bought them all, marvelling at Sheila’s talent for remaining relevant, even after fifty years of writing.

In 1982, Gilbert retired from the Ministry of Works. During his thirty-three year career he rose to the position of Principle Power Investigator, managing a staff of sixteen engineers, while still preferring a slide rule to a calculator. Gil had a “unique” filing system in his office,
one of the most cluttered in the public service, according to his co-workers. Only he could find a particular document, but he could do so within minutes.

In that he and Sheila had much in common.

Gil spent the part of his retirement writing books of his own, including *Power from Waikaremoana: A History of Waikaremoana Hydro-electric Power Development*, and *Waitaki Dammed and the Origins of Social Security*. The latter book resides in the public library, and I had a look at it. Although it is full of very worthwhile technical and historical material, Gilbert lacked his wife’s talent for making scientific work interesting. Unless you are a fellow engineer and dam enthusiast, I suppose. He also wrote many letters to the Dominion Post, weighing in on conservation and political issues of the day. Significant investments, in power schemes and building companies, also required careful management. Christine Dann and I found many a tattered prospectus and annual report when we cleaned up the stack house, presumably filed away according to Gil’s “system”.

Gilbert’s retirement meant they had time to do Europe again, this time for four months. They went across the English Channel on board a ferry, *L’Amorique*, and headed for the walled city of St. Malo, in Brittany. “Very much a fortress seaport,” says Sheila in *Round the World in 83*, “Cold stonework in the rain.” The French countryside was lovely though, filled with bluebells and red poppies, sketched by Sheila from a train window.

Germany was trying at first, as they rolled into Karlsruhe too early for breakfast and without the correct change for the washroom. Sheila had caught bronchitis somewhere, and coughed continually. Bremen proved to be more convivial; a chance stop at the Natusch
Fischereihaven Restaurant found the proprietor more than ready to adopt Gil as a long lost cousin. Heidelberg, “all pinks and greens” generated many more sketches, and Sheila and Gil took in the scenery from a boat wending down the Neckar River.

In northern Germany Sheila was able to find helpful locals who knew of her great grandfather, JFH Wohlers. She spent a lively afternoon with an elderly member of the original family, who had a treasured copy of Johann’s memoirs in German. His childhood home still stood, with a mighty oak tree in the yard that would have been just a sapling when Wohlers left on his overseas mission to save the souls of a heathen New World. She had read JFH Wohler’s memoirs, but seeing this artefact of her ancestor’s early life was a poignant moment for Sheila. In her description of that glorious day she uses one of those words in German for which English has no good single word translation—Gemütlichkeit, meaning a feeling of cosy, convivial atmosphere. She and Gil were feted and fed by all the locals, making them feel very welcome indeed. They were treated with such kindness, she said, “it was hard to arrange one’s face when it was time to say goodbye.”

Eventually Sheila and Gil made their way to Scandinavia, moving round the coast of Norway from Oslo to Bergen and then inland by train. After catching the ferry to the Faroes, they stayed with an artist who ran a bed and breakfast close to the harbour. The Faroes lie about halfway between the coast of Norway and Iceland, so made a good jumping off point to visit Seyðisfjörður, a small port beside an inlet of the same name on the Icelandic coast. Sheila was very pleased to be back in Iceland again, waxing long and ecstatic about the flowers and birdlife. After a few weeks the same boat took them back to the Faroes, then it was on to Scotland, and a chance to see the Orkney Islands, home of the ancestral Traills. They were able to peer in the windows of Westness, the old Traill home on Rousay, but no one was
home to give them a tour. It had long passed out of the family and was now owned by two
doctors. Sheila records the day as wet and melancholy, perhaps matching her mood. They had
come a long way to see Westness, and were greeted only by the new owner’s cats, and a wild
and unkempt garden.

Last came a whirlwind of sightseeing and visiting friends as they made their way down the
Scottish countryside and through Yorkshire before finally ending up in London for two weeks
of research at the British Museum of Natural History and the Linnaen Society.

After a few more onerous days of travel Sheila and Gilbert returned to New Zealand, loaded
down with sketch books, notes and souvenirs given by friends and relations. In many ways it
was the trip of a lifetime, and Sheila does a pretty good, if hurried, job of encapsulating (and
illustrating) their travels in Round the World, which was published by Nestegg Press. But
much sadness and heartache would fill the time between that glorious adventure and the

Another invitation to write a book had arrived shortly before the 1983 trip to Europe, from
Geoffrey Swainson, a great-grandson of William Swainson, the naturalist. William Swainson
of Fern Grove had been imagined as a lavish production; coffee table-sized with full-colour
plates. But the money could not be found to publish it in this format, and even if it had “few
could afford to own it” says Sheila in the introduction. So a modest paperbound book with
black and white illustrations would be produced instead, with Sheila sifting through the
mounds of “Swainsonia” accumulated by Geoffrey. She had already come across William
Swainson while researching The Cruise of the Acheron. Swainson had moved to New
Zealand in 1839, and some of his fine pencil sketches were found amongst Captain John
Stokes’ papers. He left New Zealand, after an unhappy stay of ten years, aboard the Acheron as she sailed for Australia.

Sheila wasn’t sure she could do justice to his story at first:

He [Swainson] was a funny old character too. [The book] was a commissioned job and I thought, “Oh, I don't know whether I like this character very much but I thought I'll persevere.” He had his failings and he certainly had his idiosyncrasies and I think it made quite a good subject in the end.

Swainson’s biography became one of her longest books, 165 single-spaced pages of descriptive passages and quotes, with only a few pictures to relieve the reader from time to time. It’s a competent retelling, in its way, but I can’t help thinking of it as merely a warm up for the far more engaging and celebrated biography that Sheila would write next—Roy Traill of Stewart Island.

Roy, who had been a very sprightly octogenarian, slowly began to fail as he reached his ninetieth birthday. Sheila’s brother Alex became his caretaker, both of them living at the house at 7 Traill Street. Life with Roy could not have been easy, as worsening eyesight and hearing, as well as rheumatic knees, meant that he could not be left alone overnight. Unable to start the generator on his own, he might have tried to use kerosene lanterns for light, and the possibility of the house going up in flames, with him in it, seemed all too real.

Sheila and Gil visited as often as they could to give Alex a break, since Roy’s temper had not mellowed with age. His frustration with aging and his infirmities made him even more likely
to explode with rage, and Sheila sometimes bore the brunt of this. In Roy Traill of Stewart Island she writes:

His daughter and son-in-law had, earlier, been sent to fetch some items from the North Arm Camp when Roy realised he would not be seeing much more of it—and had been blasted to high heaven for failing to bring the right things. In the circumstances, and in retrospect, the blast was easily understandable; he was saying goodbye to his life’s ways—not with a whimper.

A few days after this incident Roy, trying to pull his shirt off over his head, became disoriented and blundered about the living room, finally knocking himself out and receiving two black eyes. Not long after that he walked into the glass window of his own bedroom door. Both of these injuries required rest, and again Sheila caught hell for trying to prevent him from smoking his pipe in bed. Clearly something needed to be done, both for Roy’s safety and his children’s peace of mind, so a place was found for him at Riverton Hospital:

...as friendly a heaving down place as any old sailorman could hope to fetch up in.

Gone were the objections to whatever food was prepared for him, though there might be an occasional difference of opinion on the need for a bath.

He was well looked after by the staff there, and would happily tell stories about his life on the Island to anyone with the time and patience to listen. Family members visited, often sitting with Roy in a sunny room reserved for those residents who still smoked.

A fall, which resulted in a hip operation at age 96, further weakened Roy, and he often slept through visits, or didn’t remember the identity of the callers, even those as familiar as Sheila’s cousin Marjorie. A call came in early September from the hospital to say Roy had
taken a turn for the worse. He died on the 11th of September, 1989. Alex made it in time to sit with him on that final night, but Sheila and Gilbert were stymied by school holiday bookings on the airlines. They did not arrive until the next day, but Sheila thought it was fitting that Alex, his final companion and helpmate had been the one to say goodbye in an early Riverton morning filled with birdsong that his father could no longer hear.

Perhaps it was the outpouring of tributes that occurred after Roy’s death that convinced Sheila that she should write a biography of her father. There were so many memories and stories featuring the ranger of Stewart Island that Sheila the historian would have wanted to gather up and string into a narrative. There were her own experiences as a daughter too—deep hurts and happinesses that could perhaps now be better understood and laid to rest along with Roy. It’s an old cliché but *Roy Traill of Stewart Island* really was a labour of love for Sheila. There is no doubt that she did love her father, despite his mercurial nature, and she felt closer to him than her quiet, longsuffering mother Dorothy, who had died thirty-one years previously. Sheila spent two years on the book, gathering pictures and materials from family and friends of Stewart Island, retracing Roy’s tracks through the bush and speaking to those who had known him—a long list. Roy’s conservation work and expert knowledge of bushcraft gained him national fame; he has an entry on *Te Ara*, the online encyclopaedia of New Zealand biography, and also a Wikipedia page, though his daughter, well-known in her own right, does not. The first and second editions were published by Craigs, and Sheila has brought out a Nestegg Press edition subsequently.

If Roy Traill had lived, he would no doubt have been proud of Sheila’s next book—*An Island Called Home*. It is the closest she has come to writing an autobiography, and much more besides. Her book about Stewart Island contains both history and science, wrapped in a
blanket of warm reminiscence and Sheila’s abiding connection with the land of her childhood. A grant from the New Zealand Literary fund helped Sheila with her research, which included climbing Gog (at age 63!), one of the granite domes that guards Port Pegasus. The trip was made more palatable, perhaps, by the offer of a helicopter ride to avoid the tedious, mud-filled walk into the Fraser Peaks. Sheila and Gilbert, as well as her brother Alex, Dr Ulrich Schweinfurth and his wife and daughter made the trip. She describes their approach in An Island Called Home—

To the east the Toitoi River cut a deep brown trench, whitened by rapids, and its outlet meeting head-on the surges of a rolling sea. Ahead, granite outcrops began to appear; soon they came thick and fast. We followed high above the old way to Pegasus, the pilot kindly circling Lees Knob in a deft manoeuvre, then pointing our collective nose to the fantastic group known as the Fraser Peaks. First came the Hielan’man—lower than the others, his blocky form eroded along the joins so that he looked as if built from partly piled up rocks. […] Magog, which looks like a delicate spire from Cook’s Arm is at closer quarters an up-rearing outcrop with one blocky edge. Gog towers up above the rest, with another nearly as high slightly to one side—the one that rises so conspicuously behind Easy Harbour.

The helicopter pilot offered to take Sheila to the summit the lazy way, but she wanted to feel as Roy did when he had summited Gog in the early days with a couple of young acquaintances of Sheila’s. (“If Cath and Joan could get up there,” I said to myself, “so can I.”) Never mind that Cath and Joan were decades younger at the time. The pilot duly dropped her at the foot of the mountain and took the others away to look for a less energetic way to spend the afternoon.
At that point, the “soft living” as Sheila put it, came to an end. Fighting her way through the heavy scrub at the foot of the mountain proved exhausting and the steep granite slab that followed made her gasp for breath. “Just as I was wondering which short gasp would be my last,” she says, “the steep slab evened off, revealing a most opportune hollow filled with pure cold water.” Thus refreshed and cheered she inched her way along the summit ridge to the top, stopping only long enough to take a rock sample and some photographs, before slowly retracing her steps downwards “remembering that if I were to trip and fall a helicopter was at hand to pick up the bits.” She met up with Gil and the others later, and they were ferried back to Halfmoon Bay. It had been, said Sheila “a highlight of all our lives”, though she mourned the inability to hear the bird calls from their lofty approach. “I would still like to go back, the old hard way, sit still and wait for the robins and fernbirds to come out of hiding.”

*An Island Called Home* had been in incubation for some time before Roy’s death, and included a matchless piece of research. Sheila was able to tell him about her circumnavigation of Stewart Island aboard the three-masted barquentine *Spirit of New Zealand*. Sheila and her friend Marion were paying passengers—most of the others aboard were young people selected by lottery for a chance to experience life on a tall ship for a week. The Spirit of Adventure Trust was begun in 1973, with the mission to introduce high-school-aged children to sailing. The student-sailors learn independence, confidence and resilience as they take over the day to day running of the tall ship, doing everything from navigation to night watches to polishing the brass fittings. Sheila was pleased, through her grant from the New Zealand Literary Fund, to support the Trust’s work and also revisit her old haunts on Stewart Island in a ship far more magnificent than anything her father had ever skipped about the coast in.
They set off for an easterly circumnavigation, and Sheila (“the most Ancient Mariner representing the Island”) was soon awash in poignant reminiscence:

Memories of our days in Paterson Inlet, ashore and afloat from infancy, of coastal walks and overland tramping trips, of the Nightingale [cutter owned by the Leask family] in the Rugged Passage and a muttonbirders’ boat bound for Horomamae, kept crowding in, each seen from a perspective so rich and strange that at times I was laughing with excitement, at other times half in tears.

She busied herself with learning the mysterious ways of modern navigation by the numerical geographic point location system rather than the familiar, to her, combinations of the letters NESW. She identified the abundant bird life, and made night time sightings of phosphorescent plankton, summer lightning and a brilliant aurora. Her enthusiasm for rowing led her to injure a rib during excursion to shore, which though strapped by the nurse on board, continued to give her trouble through the rest of the voyage. But nothing would dampen Sheila’s enjoyment of the trip, which even included an ascent of the main mast once the Spirit of New Zealand was again safely at rest in Bluff Harbour.

It must have been a splendid journey, made all the sweeter by the fact she was able to share it all with Roy before he died.

With the climbing of Gog and the circumnavigation of Rakiura behind her, Sheila set out to write An Island Called Home. Encompassing history, flora, fauna, personal anecdote and even astronomy, the book represents the best of Sheila’s writing. It is lavishly illustrated, both by Sheila’s pen and ink drawings and colour plates of her mother Dorothy’s and grandmother Emily’s paintings of Stewart Island. As an invitation to visit the island it is peerless, with
advice on how and when to travel, where to stay and all the myriad sights to see. It is
dedicated “To the Island” but it is also a fitting epitaph to Sheila’s family and a time when
life was simpler and connections to the land less tenuous:

    My grandmother Emily Moffett, a well-known artist of her day, died during my
student days, my mother in 1958. This book may serve as a memorial to them as well
as to the Island we all used to know—a place belonging to nobody, but one to which
many of us still like to feel we belong: a home to care for and cherish (and in that
sense) keep.

There are no Traills living on Stewart Island now, but as Sheila told Kim Hill in an
interview—“It still feels like home. I’ve got a foot in both Straits [Foveaux and Cook],
really”. Yet Stewart Island has changed in many ways, not all of them agreeable. In the same
interview Sheila said:

    It’s different. It’s a public place and it used to be an empty place. We would tramp
over to Mason Bay, tramp over the Ruggedy Flats or overland to Pegasus and there
would be nobody else about. But now I see on the covers of magazines pictures of
West Ruggedy Beach and I think “goodness me everyone goes there now”.

Sheila and Gil set off for Europe again in 1995, for another look at the people and places they
had grown to love on previous visits. But this trip would end with something less than happy
memories. Hindsight often provides a lens through which seemingly insignificant events can
be magnified and studied and now Sheila is sure that Gil’s dementia first began to show itself
on their visit to the Orkney Islands. She recalled in an interview with me in 2012:

    We were in a bus and the husband and wife who were conducting this trip sort of
sitting in the front seat and we got into some sort of hopeless argument, Gilbert and I,
and he insisted, just insisted, that something was so and things were sort of coming undone, breaking down.

The subject of the argument has been forgotten. Sheila knew she was right, but Gil would not be convinced, and continued to contest the point long after it was necessary to do so. She wasn’t particularly troubled at the time, after all, they did argue from time to time about inconsequentials. But there were other signs as well. He seemed unsure of himself, got turned round while they were traveling, or forgot where they were meant to be going. Small things that began to add up to something bigger in Sheila’s mind, though she wasn’t sure, then, what it was.

After they returned home to Owhiro Bay, Sheila noticed that Gilbert had begun to drag his foot as he walked. Again, this small sign was at first discounted—his clumsiness was put down to worn-out shoes. But new shoes and rest did nothing to help. The medical profession eventually provided a devastating diagnosis—Gilbert was seriously ill with Parkinson’s disease, an incurable and degenerative neurological condition caused by the brain’s inability to manufacture a key neurotransmitter, dopamine. It was, in effect, a lingering death sentence.

Gil had always been a keen walker, but now he took to wandering far and wide alone, often getting lost. Strangers would pick him up and bring him home, and he would not remember their names or where he had been. It must have been so difficult for Sheila to see her proud and intelligent husband utterly confused and stumbling about. Nor, tragically, was he unaware of his decline, Sheila remembers:

He started losing his grasp of things. Not remembering, no realising things, not recognising where he was and what he was up to. So it was quite hard on him when
he realised things were not quite as they should be, I think that must have been a pretty awful stage for him.

The installation of the cable car helped keep Gilbert at home during the initial stages of his illness. Later though, when his condition deteriorated, Sheila no longer had the strength to help him up when he fell or to watch over him twenty-four hours a day to make sure he didn’t wander. She made the gut wrenching decision to put him into full-time care, first at the Rita Angus Village in Kilburnie and later, when his health worsened, at the Alexandra Rest Home in Newtown. This step was devastating for the woman who had been by his side through thick and thin for most of four decades.

Still, through all the heartache and loneliness, Sheila continued to write small books and republish others through Nestegg Press. The new books dealt almost exclusively with family history and included *Natural World of the Traills* (1996), *My Dear Friend Tuckett* (1998), and *A Naturalist and a Gentleman; Charles Traill of Ulva* (1999). Although not as generally well known as some of her earlier works, they provided Sheila with subjects that made for interesting research and are no doubt useful to others (like me) who are searching for information about the Traills and their naturalist bent. They weren’t commercial works, in any sense of the word, but they served an important purpose, nonetheless. The research and writing filled Sheila’s lonely days, and gave her something to live for. This, perhaps, is one of the most important things I learned from Sheila’s writing career. Writers write—to sell books, make money, get famous—but that is not the only reason. Whether someone reads your work isn’t, in the end, what makes it valuable. It is the joy you get from writing that matters. The quality of a book done out of a sense of obligation, like Sheila’s *On the Edge of the Bush* or *William Swainson*, inevitably suffers from the author’s lack of enthusiasm. Sheila’s best
writing is found in books which she wanted to write and had the background knowledge to do justice to the subject. And though some of those books did not achieve commercial success, the writing of them is what kept and keeps Sheila Natusch going forward into old age despite the inevitable health issues that accompany it. Health issues which would have more and more impact on Sheila as she passed into the next decade of her life.
Chapter Nine—Get Going and Stay Going

Though the new millennium saw Sheila turn seventy-four, she still managed to cycle or ride the bus out to the rest home to visit with Gilbert almost every day, even after he had virtually ceased to recognize her. He grew very quiet and disinterested in life, except for occasional outbursts—sometimes he would shout out, “Where is that bloody woman?” when she arrived at the home. Old climbing friends and workmates could sometimes reach the part of his brain that still functioned, and he would seem almost like his old self, for a little while. Then the curtains would close again and he would spend hours sitting in the rest home gardens, looking at nothing, speaking to no one.

The house was quiet without him, but she soldiered on, gradually reducing her living space to the barest minimum. The bedroom she and Gilbert had shared was abandoned in favour of a single bed in the downstairs lounge, a space she could comfortably heat without too much expense. The upstairs room became a place of haphazard storage rather than Sheila’s workplace, as her rickety joints could no longer deal with the stairs. Except for a carefully tended area just around the house, the garden grew rampant with rambling vines. But 42 Owhiro Bay Parade remained her home, and she had no intention of leaving it, except “feet first”, as she told me in an interview. The stack house deck was her favourite place to sit outside, sheltered from the rains and fierce southerlies. She could still see her old friends, the Kaikouras, and on warm days she would sit on the bench in the cable car, studying that far horizon and listening to the sound of the gulls wheeling on the beach below. A daily bathe in the frigid waters of Owhiro Bay (in togs, not a wetsuit!) kept her feeling alive and connected to the natural world. She even had a little inflatable vinyl boat that she would row out on calm days, and then let the wind, filling a tiny hand-held sail, carry her back to shore. Nor was she lonely, for the most part—there were visits from friends, an occasional trip to the
movie theatre in nearby Brooklyn, and, as always, the satisfying demands of writing and Nestegg Press.

The genealogical research that Sheila had undertaken in multiple trips to Europe was condensed into Out of Our Tree, a look at many of the well-known Traills that she had not already described in her other family history books. There were minister Traills, soldier Traills, even blue-blooded Traills, as well as a collection of “rapscallions and scallywags”.

Out of Our Tree was published in late 2001 by Nestegg. It was originally a paper which had been submitted to a Scottish journal, but they kept it so long without making a decision Sheila decided to publish Out of Our Tree herself in late 2001. She speaks, later in a letter, of her frustration when the paper was eventually accepted, and then rejected again, on the basis it had already been published somewhere else!

Sheila lost the last member of her immediate family in 2003, when her brother Alex passed away suddenly in November from a massive heart attack. He was 75 years old, relatively young when compared to his long-lived father and sister. Other than a stint in the Navy, Alex had lived his whole life on Stewart Island. His boat, the Olive, had been a familiar presence in the coastal waters for over forty years, both for commercial fishing and later as a pleasure craft. Although Alex never married, Sheila recalls that he once had a fiancée who came from the mainland. A visit to the disorganized Traill household, which included Roy letting fly with his temper, seems to have scuppered that relationship. Alex lived on alone at 7 Traill Street after Roy’s removal to Riverton, as the house gradually fell apart around him. His body was cremated and the ashes interred at the Halfmoon Bay cemetery alongside Roy and Dorothy. He shares a headstone with his mother, where he is described as a “valued and devoted son”.

The death of Sheila’s old friend Janet Frame occurred very soon after that of her brother, in January, 2004. Although they had not remained close, Janet and Sheila still corresponded, mostly through Christmas and birthday cards. Sheila had met and been interviewed by Michael King, Janet’s biographer, in 1997. Janet had retired to Dunedin by then, living a quiet and protected life away from the demands of her considerable literary fame. When she died of acute myeloid leukaemia at seventy-four, Dunedin, the city that bookended her life, decided to memorialize their most famous writer by a programme of song, dance and tribute. Sheila was invited to contribute a piece, and deliver it in person. She describes the occasion in Letters from Jean:

The speeches were long, most of them brilliant, from friends well-known in political as well as creative arenas. Janet would have loved the music; Shepherd on the Rocks (quite ethereal), settings of her poems, movingly done, as well as a solo ballet of her search for Love and the torments endured in that quest. I think that, by now, she wouldn’t have minded hearing her own voice reading from previously published and as yet unpublished pieces. It must have been hard to fit it all in, and one little jigsaw piece was missing, never mind whose…

Sheila’s personal tribute was apparently overlooked, but it wasn’t a wasted trip, as she was collected at the airport (by someone in TV, but naturally Sheila had never heard of him) and chauffeured round all their old haunts. She was careful to say very little about her relationship with Janet, feeling that the author had told “the world all it needed to know about her”.

Letters from Jean came about as a way for Sheila to let Janet speak for herself about their friendship, illustrated with some watercolours and sketches made for Janet when they were friends during their Teaching College days. It is a moving memorial to her erstwhile friend, and certainly gives the reader a glimpse of the “real” Janet Frame.
About this time Sheila began to have some troubling health problems of her own, feeling more fatigued and shaky than she ought to, even with all her busyness and worries. Sheila had been diagnosed with a heart murmur some years before, while in the hospital for an unrelated matter. A trip to the doctor and some tests provided an unwelcome addendum to this—her mitral valve was giving up, making her heart work harder and harder to pump blood. She would need an operation to repair it, but who would look after Gilbert? Friends rallied round, as good friends do, and she was put on the waiting list for open heart surgery.

The date for Sheila’s operation was set and she mentally readied herself to be laid up for several months. The night before her admission, when she had already been to the hospital to be x-rayed and meet with the surgeon, Sheila’s good friend Irene Fagan, along with Gilbert’s caregiver from the hospital, arrived on her doorstep with grave news. In the cruellest of coincidences, Gilbert had chosen that moment to die. He was eighty-seven years old.

Everything had to be put on hold while Sheila, suffering from both a literal and figurative broken heart, dealt with the funeral arrangements. It must have been incredibly difficult, but as she said to me in an interview—“He [Gilbert] wouldn't want me to turn my face to the wall, he wouldn't want long faces. I've got to keep going. Get going and stay going.”

Knowing Sheila as I do now, this answer does not surprise me. Her whole life has been a battle to overcome setbacks—to get going and stay going. Yet, in an interview with Kim Hill in 2007, she told a slightly different story. She thought, she said to Kim, that there was rather less point in having the delayed operation now that there was no Gilbert to go home to or visit. Kim asked her, “So you toyed with the idea of not having the operation?” Sheila, perhaps feeling that she had let slip something too raw and personal, answered quickly, saying she never seriously considered it. Although Gilbert’s life had not been quite over when
she went in for her surgical prep, it hadn’t been what it was for a long time beforehand. Then there was the possibility of disappointing the many medical professionals who had “gone to bat” for her to have the operation when others thought she was too old. That brief moment of doubt expressed to Kim Hill is the only comment I’ve ever heard Sheila make about giving up or giving in. The interview ended, however, in typical Sheila fashion. When Kim says, with heartfelt sympathy, that the conjunction of her operation and Gilbert’s death must have been terrible, Sheila replies firmly, “Other people have these things too. Other people have worse.”

The operation was a success, and Sheila, sporting an impressive scar, was soon back to her chilly dips in the sea. “It took me awhile,” she says in So Far So Good, “to learn to swim without sinking at the stern, but now my hind limbs kick and splash their way along”. She still missed Gilbert desperately, calling him her “best mate”. Again, from So Far So Good:

Starlight had always evoked wonder, and still does, though my companion in observation of comets, meteors and auroras is no longer by my side in a sleeping bag in some dark corner of the Southern coast. I had known the brightest constellations from early childhood (my mother taught me their names) and there is some intellectual comfort in stellar perspectives when human crises throw humans off balance.

She also quotes an early poem about the loss of her imagined ideal beau—rather like her father, she writes, “only younger, more even tempered and less prone to criticism”. Gilbert filled that romantic wish list perfectly when he arrived on the scene. And the poem, written while she was still in high school, now sounds quite uncannily prophetic:

Together we once sought the pure silent mountains,
That glistening whiteness flung sheer to the sky,
The ice shining blue in its luminous hollows,
The hard broken rocks, and the wind singing high.
We looked for white daisies, and high-country buttercups,
Trembling so fragile by grey shattered stone.
Together we once shared the joy of the climbing—
But now I must climb all my mountains alone.

Once again, Sheila rose to the challenge, making for herself a satisfying life although her beloved partner was no longer there to offer support and encouragement. After having been reminded, perhaps, of her own mortality, she stepped up the contributions she was making to several charities and covenanted her eighty-five hectare bush section in Paterson Inlet (a legacy of her father) to the Queen Elizabeth II Open Space Trust. This trust was begun in 1977 to ensure protection of privately owned land in New Zealand that has aesthetic, recreational, social or scientific value. The land remains the property of the owner, but with a permanent covenant in place that forbids development, overseen by the trust. This covenant remains even if the land changes hands. Sheila is generous by nature, but this gift to the people of Stewart Island and the nation is a grand gesture indeed.

In 2006, Sheila published another family history, the first one devoted to her mother and grandmother, rather than to the various Traills. Emily and Dorothea: Two Southland Artists, is a scrapbook style publication illustrated with watercolours done by both Emily and Dorothy, as well as a collection of photographs and some biographical information gathered by Sheila. At twenty-five pages, it can’t be said to be a biography of the same calibre as Roy Traill of Stewart Island, but it does provide some interesting insights into the difficult lives of Emily
and her daughter. The paintings on show are stunning in their simplicity and beauty. It is easy to see the source of Sheila’s artistic talent.

Sheila has used that talent, along with her gift for glowing description, to entertain and educate the nation for much of her life. It was fitting that Queen Elizabeth II showed her gratitude for Sheila’s many artistic and literary contributions in the 2007 New Year Honours List. She was appointed a member of the New Zealand Order of Merit. With typical humility, she writes of her award in *So Far So Good*:

> That this recognition should have given pleasure to my many kind friends (all of whom deserve medals) is the best reward of all. Without them, I might still have been struggling my way back to holding pen and pencil, let alone getting back on my two feet, after surgery which was in itself an act of faith in my stubborn nature.

Roy, who had been made a Member of the Order of the British Empire in 1963 for services to Stewart Island, would no doubt have been proud of his talented daughter.

Although many of Sheila’s works have not been successful commercially, their impact on her life has been unmistakeably positive; creating opportunities for research and reflection, giving her the chance to remain active and relevant as she slips in to old age, and providing her readers with new and interesting anecdotes and opinions on a myriad of subjects. This determination to continue writing and supporting her own publishing through printing in small lots is all Sheila, and enhances her already extraordinary career and lifestyle.
Chapter Ten—Full Circle

We come now to the time when I first met Sheila Natusch, in 2012. She had just been in hospital for another serious operation, this time to remove part of her bowel. Concerned that she had lost weight, Sheila’s doctor had ordered some tests. Sheila, characteristically, thought they were a waste of time since she was still fairly active and walked a lot. The procedures were fairly dismal, “being washed through with stuff like paint stripper and so on and so on,” but the outcome of the tests was far worse. Sheila had bowel cancer, and needed a partial colostomy. The operation, at age eighty-six, couldn’t have been an easy thing to survive, but Sheila did, staying in the hospital until she was able to eat solid food again. She didn’t want chemotherapy, though it was offered to her. “Why not?” I asked her—“It is such a miserable business and I have seen other people have it. I said, ‘No, I would rather take my chances’. If it comes back, it comes back, but I’m 86 and I'll probably peg out of something else. Or blow out to sea in my boat before then.”

How wise and brave of her to refuse a treatment that might prolong her life but at the cost of great suffering. Hospitals have a duty of care that sometimes goes beyond the pragmatic and into the needlessly heroic. Not everyone wants to live beyond their allotted measure of health and sanity. In any case, Sheila recovered well other than remaining desperately thin. Without the normal padding of fat sitting becomes uncomfortable after a few moments, and she has tried hard to gain the weight back that she lost.

When I first interviewed Sheila for this book, she shared with me her daily journal. She wasn’t a dedicated diarist until her heart operation, when she took to writing down her medical procedures to help her remember them. From there it expanded into a page or two a day, and is now a blunt and personal account of her life. I was honoured to be entrusted with
it, and pleased to see that she had described me as “congenial” after our first meeting. Maybe she added that after she decided to let me see it!

Her life now is as agreeable as it can be for someone in their late eighties. She has a routine that she follows nearly every day, fair weather or foul. Sheila is an early riser, at least by my standards, and is often out of bed by 6:30. She has porridge and cream with fruit and maple syrup for breakfast most days, along with a “raft of pills” washed down with orange juice. There might be a dip in the sea (yes, even now), if the weather is decent, but the little yellow dingy rests, forlorn, on the porch of the stack house, alongside the sail. She’d like to get out in it, but her balance isn’t what it once was, and she sometimes loses strength in her limbs and falls over without warning. “Gives a whole new meaning to the old Irish blessing *may the road rise up to meet you,*” Sheila tells me with a laugh and a shrug. This doesn’t stop her for setting out for the Bach, her favourite local café, just about every day. Sheila has a peculiar rolling gait, as though she has spent all her long life aboard ships in the Southern Ocean. It makes her easy to recognize from a long way off, and is charmingly appropriate for someone whose existence has been enriched, from beginning to end, with her association with the coasts of all the major islands of New Zealand.

Sometimes Sheila meets friends at the Bach, sometimes she sits with her coffee and friand and chats with the owners, Gary and Mareua, who spoil her unashamedly. I’ve been to lunch with her there several times, for bowls of their excellent chowder or fish and chips. She eats heartily, for someone so small, and carefully wraps up any leftovers to have for tea.

From the Bach, she proceeds (usually by taxi) around the bay to the post office and supermarket. Her experiences with the drivers often occasion comment in the journal. Some
are sweet and helpful, and will carry her groceries up to the cable car. Others stop abruptly and all but push her out of the car. One was a religious bore, trying to convert her on the way home, and then left her to struggle with her packages. “All pray and no work,” she wrote afterwards, and hoped she would never have to ride with him again.

There is always correspondence to deal with in the afternoon, as well as the puzzles in the paper to keep her mind engaged. Although she does sometimes forget things (the entry for October 8, 2012 reads “I don’t know what the hell I did!”) Sheila is very, very sharp still. A request for a piece of information results in her shaking her head for a moment, but she generally comes up with it, sooner or later. Her journal is macaronic, including snippets of French, German and even Icelandic, as well as the weather, poetry and news of her comings and goings. As with all of Sheila’s writings, it contains very little in the way of complaint, but a whole lot of cheerful recollection and gratitude for the friends and experiences that enrich her life.

After spending some time in the afternoon sitting outside, Sheila makes herself some dinner. She eats very well, cooking simple meals for herself of venison or other red meat, instant mash and vegetables, with a tot or two of red wine, often mulling it with honey and spices. Once, when I visited the house with Christine Dann to do some work on the film No Ordinary Sheila, I was surprised to open the small refrigerator in the kitchen and see it completely empty. Was Sheila getting too old to care for herself and forgetting to eat? However, as it turns out, that refrigerator no longer goes—it is used for storage only. She has another, and it was reassuringly full. Her only other concessions to modern life are a microwave and a couple of electric heaters. Those are more of a worry, with all the haphazard piles of tinder dry paper and books scattered around the living room. She does not have any
smoke alarms, and perhaps she should, but I think she has earned the right to live how she wants.

Bedtime seems to follow shortly thereafter—the heater goes off as she settles into her single bed, alone save for the company of her half-wild cat Bella. Bella is quite the character, much like her owner in her pursuit of ferocious independence. Once, when I visited and Sheila was reading some papers I had brought for her to sign, Bella insisted in getting right in the middle of them. I took her on to my lap, and patted her reassuringly. I like cats, have four of them myself, but Bella is something else. Quick as a flash, she sank her fangs into my palm and then slunk away. I had to surreptitiously wipe a trickle of blood onto my jeans, and hope Sheila didn’t notice my pained grimace. Later, when I read the journal, I found out that Bella frequently bites Sheila as well, often drawing blood. But still, Bella is company, of sorts, in the long, cold nights of winter.

Sleep can be elusive sometimes, due to discomfort from the injuries she suffers when she falls, but Sheila will listen to Concert FM to while away the hours of darkness. She notes in her journal classical music that she enjoys, and remembers pieces that Gilbert would have liked too. He is never far away from her thoughts, especially at night when she can’t keep herself busy enough to dull the poignant memories of their time together and the pain of his decline and death.

Although Gilbert is gone, Sheila still has other dear friends who see to her welfare. She often lunches at Irene Fagan’s house on Sunday and they will watch documentaries or Antiques Roadshow on television. Other friends ferry her to dinner or to shows in Wellington. Gilbert’s
relatives look in from time to time, and so do any passing Traills. Sheila also keeps up a lively conversation, in several languages, through correspondence with friends overseas. All in all, a very satisfying twilight life for someone who has always valued her independence and wishes to go on living that way for as long as she can. A blackly humorous sign, just inside the living room door of Sheila’s house attests to this. In straightforward language it includes instructions and contact details designed to help the unlucky person who finds her either incapacitated or dead.

Sheila Natusch, uncompromising to the end. I hope she has many more trips to the Bach for a coffee and friand before she leaves this earth.

Her legacy will, no doubt, long outlive her.
Figure 10 Sheila and me on her cable car
Final words

If there is anything I have learned in the writing of this book it is that talent will only get you so far in life. To be sure, Sheila has talent in abundance—between the natural history knowledge bequeathed by her father and the skill with a brush and sketchbook given her by her mother and grandmother—all honed with persistent practice and boundless research. She has also been blessed with unquenchable curiosity and a child-like sense of wonder about science and the natural world. But there is so much more to Sheila’s success. Without her steadfast nature what would she have accomplished in the face of all the setbacks and heartache that she experienced? She has, she says, “been extraordinarily lucky” but I think she has created her own luck through an unswerving faith in herself, a hard won ability to remain positive in adversity, and most importantly, that unshakable will to “get going and stay going”.

I couldn’t, in a volume this size, talk about everything that Sheila has written and illustrated over the years. Nor could I meet with all of the people who know her or her work. That would take a lifetime or two. But her achievements speak for themselves. She has charmed and educated several generations of school children, awakening in them the desire to know more—that science is possible, even fun, and it lies right outside their back gate, at the beach or the bush, or above their heads on a clear starry night.

Grownups too have benefitted from her well-researched histories of this land and her people, always personal, always thought-provoking. There is science for them as well, wrapped in amusing anecdotes and sweetened with memories of long lost childhood and its wonders. Plus social commentary, travel-writing, memoirs and book reviews; Sheila has done it all, at one time or another.
Then there are all the positive aspects of Sheila’s long life—as a daughter, wife, friend, writer, researcher, artist, publisher and agent. She is someone who appreciates and embraces both the joy of travel and the contentment of staying in one place for sixty-odd years. Someone who feels just as contented in a rough bush camp as she does in the big city. Someone who values experiences over “things”, remains frugal and yet is generous to others with her legacy. A woman of uncompromising principles and steely determination, who is comfortable with the choices she has made throughout her long life and looks forward with enthusiasm rather back with regret.

I have found answers to the questions I had when I began this work. Sheila’s success as a communicator of science is in no small part due to her careful selection of subjects that interested her; books that she wanted to see written and published, for her own use and for others. Her writing has been honed by decades of practice, beginning in high school, when she first decided that being an author and illustrator was her chosen career. Sheila already possessed a deep understanding of natural history but she was determined to enhance her writing skills and scientific knowledge through further education, and did so at the University of Otago, while supporting herself with a tiring collection of part time jobs. Later she would mostly abandon working for other people altogether, after she found that her creativity and happiness were stifled by institutional rules and regulations. And finally, as she grew disillusioned by commercial publishing, she created and continues to maintain Nestegg Press as a way to see her previous books remain in print and provide opportunities for new books to see the light of day. She has also lived carefully and frugally, maximizing every opportunity to travel and learn, and translating all those experiences into books large and small.
These are the keys to her success, and what I have learned from them will make me a better science communicator. I have also learned a gentle path to a happy and successful twilight life—by staying physically active, creating long-lasting writing opportunities that don’t depend on commercial success, and living my life with gratitude and zest.

It seems only fair to let Sheila have the last word, in an excerpt from her column “In My View” published by the Listener in August, 1969:

Pathological misery is a state of mind. If I am miserable it is my fault, not the fault of the community at large and I’ll thank nobody who ever dares to feel sorry for me. As Donne didn’t say, each herring maun hang by its ain tail.
Acknowledgments

I hope that this book has given the reader a glimpse of one of the most remarkable women I have ever had the privilege of meeting. If they turn the last page feeling they have come a little closer to Knowing Sheila, and want to seek out her works in libraries and bookstores around the country, then I will count my work as a success.

But this success would not be possible without the help of many people. I must, first of all, thank Sheila Natusch for making me feel very welcome, answering my sometimes too personal questions with thoughtful aplomb and giving me free access to her papers and books. Her friendship is one I will always treasure.

My advisor, Lloyd Davis, pushed me when I needed pushing but was mostly content to let me get on with a project that has taken far longer than we agreed it would. I hope his trust in me has not been misplaced. His help was invaluable in pulling together the final manuscript of this book.

Elaine Hamilton and the staff of the Rakiura Museum on Stewart Island granted me access to the Traill family archives and shared their own memories as well. Staff at the Hocken and Turnbull Libraries also found helpful manuscripts and pictures, as did the archivist at the Southland Library in Invercargill. Barbara Clark, of Southland Girl’s High School, was instrumental to my understanding of Sheila’s secondary education.

Christine Dann shared her research on Sheila with me, and I tried to return the favour when I came across a particularly amusing anecdote. It has been a pleasure working with her, and Hugh MacDonald, the director of No Ordinary Sheila. It is my hope that the book Knowing
*Sheila* and the film *No Ordinary Sheila* will each enrich the other, and show different sides of their remarkable shared subject.

Many others, including my family, who sometimes suffer from the same messy house and spotty meal service described by Sheila, provided insights and encouragement along the way. I wish I could name them all.

Susan Hamel

May, 2015
Appendices

Figure 11 Map of Stewart Island

(This file is licensed under the Creative Commons Attribution-Share Alike 4.0 International, 3.0 Unported, 2.5 Generic, 2.0 Generic and 1.0 Generic license.)
Traill Family Tree

Family members mentioned in Knowing Sheila in bold type

<table>
<thead>
<tr>
<th>Johann F H Wohlers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gretchen Wohlers</td>
</tr>
<tr>
<td>1853-1935</td>
</tr>
<tr>
<td>Eliza Hanham</td>
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</tbody>
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<table>
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<tr>
<th>William Traill</th>
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</thead>
<tbody>
<tr>
<td>Arthur William Traill</td>
</tr>
<tr>
<td>1852-1936</td>
</tr>
<tr>
<td>(Other siblings and half-siblings of Arthur: Wiliam, Harriet, John, Mary, Charles, Ellen, Elizabeth, George, Henrietta, Eliza, Robert, Frederick, Walter, Edwin, Rosa)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Henrietta M Heddle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Henry &quot;Roy&quot; Traill</td>
</tr>
<tr>
<td>1892-1989</td>
</tr>
<tr>
<td>Other siblings of Roy: Elta, Frederick, Arthur, Edwin, Charles, Wiliam, Gordon</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Emily Miller</th>
</tr>
</thead>
<tbody>
<tr>
<td>1866-1947</td>
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<table>
<thead>
<tr>
<th>Dorothea Moffett</th>
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</thead>
<tbody>
<tr>
<td>1892-1958</td>
</tr>
<tr>
<td>Other sibling of Dorothea: Arthur (died in infancy)</td>
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<table>
<thead>
<tr>
<th>Arthur Moffett</th>
</tr>
</thead>
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<table>
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<tr>
<th>Sheila Ellen (Traill) Natusch</th>
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</thead>
<tbody>
<tr>
<td>1926-</td>
</tr>
<tr>
<td>Married Gilbert Natush</td>
</tr>
<tr>
<td>1917-2003</td>
</tr>
</tbody>
</table>

Figure 12 Traill family tree
Photo Credits

Figure 1 Author’s collection

Figure 2 Collection Nancy Schofield

Figure 3 Author’s collection

Figure 4 Rakiura Museum

Figure 5 Collection of Sheila Natusch

Figure 6 Collection of Sheila Natusch

Figure 7 Collection of Sheila Natusch

Figure 8 Rakiura Museum

Figure 9 Collection of Sheila Natusch

Figure 10 Author’s collection
Conclusions

In Life Story/Science Story I have attempted to show that the literary genre of biography can be a useful adjunct to science communication. In a limited review of the existing literature I have discussed the present state of science communication in an educational setting, the use of storytelling as a successful method of communication, while also noting problems and concerns, and delved into research discussing those qualities which make a biography useful for science communication.

Using my review of the literature I have synthesized a checklist of desirable traits—context, humanness, accuracy, interest, representation and synergism—and devised the mnemonic CHAIRS as an acronym representing those qualities. I then assessed each quality in turn, presenting the advantages and occasional shortcomings of each.

In the next section of the thesis, using the CHAIRS checklist, I evaluated three biographical works by the author and illustrator Sheila Natusch—Roy Traill of Stewart Island, William Swainson of Fern Grove and An Island Called Home. Of these three books, I found that An Island Called Home would be the most suitable for use as a biography for teaching science as it is well laid out, well written, and contains many illustrations and photographs. Roy Traill also contains some useful material, showing the teamwork between scientists and amateur naturalists. William Swainson is less successful. I felt the poor layout of the book would make it difficult to read, and the subject, while moderately well-known in his day, had little connection with modern life and scientific undertakings. It does contain a brief look at the history of taxonomy.
Lastly, I evaluated the creative component of this thesis, *Knowing Sheila*, my biography of Sheila Natusch. I found that it met four of the recommended qualities of the *CHAIRS* checklist. It placed Natusch in the context of historical events, but as she is not primarily a scientist it does not show the history of science and therefore did not meet this requirement. The book portrayed her as a human being, with both positive and negative qualities and gave a window into her personal life. It was as accurate as my research could make it. It deals with an interesting character, whose life is detailed with many personal anecdotes and conversational writing. As the subject is female, who comes from a non-traditional educational background, *Knowing Sheila* could be helpful in reducing stereotypical thinking about science and scientists. Her life, from her impoverished upbringing, through her pursuit of higher education, her successes in science communication and her continuing commitment to writing and publishing in the face of old age, might well make her an inspirational figure, especially to women. But *Knowing Sheila* did not meet the requirement for synergism. Other than Natusch’s cooperation with visiting scientists during her time on Stewart Island, there is little in *Knowing Sheila* to present the scientific process as teamwork driven. On the whole, I felt *Knowing Sheila* met the qualifications for a good biography, and could be profitably used in science communication for adults and teenagers.

In answering the research question for Life Story/Science Story (What qualities make biographical material a useful adjunct for science communication?) I have created a checklist that incorporates the main attributes discovered during my review of the associated literature and given it the acronym *CHAIRS*. The checklist allowed me to evaluate works by Sheila Natusch and also my own biography of the author as to their suitability for science communication. It is my hope that others seeking suitable material to include in science communication aimed for both the classroom and general public will find it useful.
Acknowledgments

My thanks must primarily go to Sheila Natusch, who sat through many hours of interviews, and patiently answered my many queries through the post. My advisor Dr Lloyd Davis, Stuart Professor of Science Communication at the University of Otago, was instrumental in helping me create a workable academic thesis to support my creative component. I would also like to thank Dr Jean Fleming, formerly of the Centre for Science Communication, for the impetus to write a biography of Sheila Natusch. My family supported me peerlessly during the writing and researching of Life Story/Science Story and deserve much gratitude.

Apart from the pulling and hauling stands what I am,

Stands amused, complacent, compassionating, idle, unitary,

Looks down, is erect, or bends an arm on an impalpable certain rest,

Looking with side-curved head curious what will come next,

Both in and out of the game and watching and wondering at it.

Backward I see in my own days where I sweated through fog with linguists and contenders,

I have no mockings or arguments, I witness and wait.

Song of Myself, Walt Whitman (1892)
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