

PROLOGUE

A BOOK OF STORIES AND STORYTELLING

I have long been interested in voices and conveying voices. I first encountered Mary Loudon's *Unveiled* (1992) almost 20 years ago. In her unusual book, Loudon interviews ten women in religious orders about the details of their lives and their perceptions of their roles, and then presents the interviews as uninterrupted extended narratives. I was struck by the way the distinctive voices of the women were an essential part of conveying their experience, that *what* they said was inextricable from *how* they said it. I was also intrigued by Loudon's technique of transforming the interviews into narratives, so that the voices were allowed to speak without the hindrance of the interviewer.

My interest in this form of narrative, constructed from oral interviews, deepened when I began to read Studs Terkel's remarkable set of work, which captures the voices of ordinary Americans on a range of topics, such as race (1992), work (1974), experience of WWII (1997), and death and dying (2014). Again, I was fascinated, not only by the content of these books, but by the immediacy of the narrative. "Listening" to voices captured on the page, some long silenced, conveyed both the weight and urgency of human experience in all its diversity. I have read and reread Terkel's books, as I have Mary Loudon's, for the sheer joy of experiencing the sound of the human voice and the variety of human experience.

Later, in the late 1990s, I encountered the ethical dilemmas of conveying voice in research, when I was writing up my study of scientists as teachers of writing (Emerson et al., 2000; Emerson, 2004). As I worked to integrate the voices of my interviewees into my analysis, using snippets of quotations, I felt some regret—and some ethical unease—that their voices were so muted through my own words, my own selection and analysis. I felt that I was short-changing my subjects—all of whom had shared their experiences and perceptions so richly and generously with me, several of whom had written huge volumes of reflection for my research—in restricting, selecting and editing their sustained and distinctive voices to my own purposes. I began investigating the process of developing narratives from interviews, and in 2003 developed a senior seminar on Life Writing where students interviewed family members and developed those interviews as narratives. The stories, and the voices that emerged, were rich, varied, and compelling stories of New Zealand life.

My primary field of research, however, is science writing and writers, and during my career I have been fortunate to spend much of my days talking to scientists about writing. Over the years, I have valued these conversations, and enjoyed the subtlety with which many of my colleagues in the STEM disciplines talked about writing and their commitment to engaging with multiple audiences in deeply nuanced ways. As a writer and writing teacher, I have learnt much from these conversations.

Meantime, I was working with undergraduate science students, most of whom articulated reluctance about writing. The students in my freshman class almost universally disliked writing, claimed to have avoided writing where possible in school, and saw writing as completely unrelated to science. My senior class could see the relevance of writing to science but were (again almost universally) convinced they couldn't write.

I became intrigued. How did the students, with all their anxieties and fears about writing, transition into writing? How did they develop and transform into the sophisticated writers I observed amongst my colleagues?

When I turned to the literature to find answers to this question, I found very little about how scientists develop as writers beyond the undergraduate classroom. In particular, the perspectives of scientists seemed poorly—inadequately—represented in the literature. I began to feel a real concern: why were scientists not speaking into the scholarly discussions about scientific writing? Why were we not hearing their voices?

I began to collect these voices, and during this period, in 2010, attended the WRAB conference in Washington. At one session, following a paper on how scientists construct argument, the general discussion focused around scientists' inadequacies as writers; the general view seemed to be that scientists were poor writers, unnecessarily opaque, not interested in writing, and in need of remediation. Neither my experience nor my research supported this view, although this was certainly not the first time I'd heard such views. As I reflected on this discussion in the following weeks and months, it seemed to me that we had engaged in a form of cultural appropriation. I now saw the problem in a new way: it was not only important that we ask scientists to speak about writing, but we needed to somehow convey those voices in a way that allowed their voices to speak beyond the cultural appropriation of a scholarly humanities-based text. We needed to find a way for people to listen.

These factors, then—an interest in conveying “voices,” a concern that scientists' voices are not sufficiently heard in the discussions about writing science and teaching science writing, a concern to avoid cultural appropriation, and a sense of our need to see the centrality of writing to scientists' professional lives—influ-

enced the construction of this book, and in particular the decision to present sustained narratives as the primary driver of the text.

GIVING SOMETHING BACK

Collecting the voices for this book has been a rich and resonant experience, and I am so very grateful to all those who made themselves available, who invited me into their offices to talk about writing. It feels like a remarkable privilege to sit in someone's office and listen to their thoughts, and I have been almost always surprised by the generosity of the people I interviewed, by their willingness to explore territory they may not have thought about before—and often by their vulnerability and humility.

I have been delighted by the variety of stories and people I've engaged with. In one week alone, I listened to a research chemist who is a competitive body builder and a reader of romance fiction, talk with courage about her commitment to growth and learning as a writer. I sat in the book-lined office of a remarkably versatile writer of physics and history while he described decisions he had made as he wrote his book on quantum physics—the opening pages of which made me laugh out loud. I asked preposterous questions of a young mathematician (“*do you think in numbers and figures or words when you're thinking about math?*”), and was honoured by the care with which he explored possible answers, and enjoyed his laughter as he came to unexpected conclusions. I listened to a mathematician who also moonlights as a jazz musician talk about the differences between *writing up* and *writing down*, and an eminent physicist describe the fun of collaborating with a friend while hiking or ice fishing. He talked about how the science weaves in and out of their conversation, but how they always come back to the physics “because that's what we like talking about most.”

My hope is that I've also given something back. Many times, after the tape recorder was switched off and we were talking more generally, the person I'd interviewed would say something along the lines of “you know, I didn't know I thought all that, I've never talked about writing before—it's been really valuable to think this out.” Participants in this study have often emailed me after the interview—sometimes weeks after the interview—to share ideas they've been working on that were triggered by the interview, or to tell me how this interview has changed their thinking about their writing or changed the way they teach or work with graduate students or support their postdocs.

I hope, too, that by sharing these stories with teachers of writing, I'm giving something back to the scientific community. I'm hoping that some of those anecdotal views about whether scientists care about writing can, at the very least, be opened for examination.

TELLING A STORY

I realise this is not a typical scholarly book—and this is intentional. Partly this is to do with my commitment not to engage in the cultural appropriation of these voices, though I must acknowledge, of course, the dialogic nature of the interviews, and that my background as a scholar in the humanities will inevitably have influenced both the construction of the narratives (in the questions I asked and did not ask, and in the process of editing the narratives), and the way I have chosen and arranged these narratives. This will be discussed further in Chapter 1.

But choices relating to the construction and “voice” of the book are also related to my aims and intended audience. My hope is that this book may be of interest and use, not just to writing scholars and teachers, but also to scientists and emerging scientists, as they strive to engage with their own writing and the writing of the scientific community. For this reason, while I have engaged with the literature, I have nevertheless tried to avoid using language that this second audience might find inaccessible.

I’ve used a personal writing style throughout this text because this book is about voices, and my voice as a teacher and researcher is a part of the story of this book. My motivation for writing was driven by personal experience: I have selected the participants and engaged with them on a personal level. To hide my own voice—even though I have aimed to mute it in the arrangement of the narratives—seemed to me disingenuous, and to disguise a significant component of the text.

One of the people I interviewed for this book told me that his favourite book, which he read over and over again, was Robert Browning’s *The Ring and the Book*. A massive Victorian potboiler of a poem—it was a bestseller in its time—and a mystery thriller, *The Ring and the Book* tells the story of a particular event twelve times, from the point of view of different characters (some central, some tangential), not so that the one “true story” can be discerned but so that the variety of human perception can be portrayed (Slinn, 1991). This study tells the same story from multiple perspectives in the hope that readers will grasp, in a new way, the breadth of experience and perceptions of scientists as writers.