Prospectus: "Writing for Telepathy", by S.B. Heard

Working title: "Writing for Telepathy: Practicing the craft of scientific writing"

Target audience: This book is primarily aimed at graduate students, postdocs and young researchers in the natural sciences. While the content is centred on the production of scientific writing, an explicit argument is included that mastering the craft of scientific writing will pay dividends for those with careers outside academia as well. The book would also be suitable for upper-level undergraduates in writing seminars, etc., particularly with the inclusion of a few text boxes addressing things like how, when the work it to be graded, to negotiate writing help from friends/colleagues without running afoul of academic regulations on doing your own work.

Central message: Two intertwined points. First, the aim and purpose of good scientific writing is absolute clarity and ease of communication between writer and reader, or "telepathy". Second, most writers aren't born with the gift of telepathy, but instead improve by deliberately practicing the craft of writing. This book will provide strategies to help scientific writers practice the craft.

Length: Planning 60,000 - 80,000 words, with 21 chapters organized into 5 parts (see annotated table of contents attached).

What distinguishes this book from the competition? The book has three major design elements: (1) explicit and unifying focus on the goal of "telepathy"; (2) concrete advice on practicing the craft, instead of long lists of prescriptive rules; and (3) an advice format centred on writer behaviour. No book to my knowledge does (1), although it's often implicit. Many books include sections that do (2) and/or (3) (Matthews et al., Successful Scientific Writing, is the closest model in terms of engaging writer behaviour), but few if any maintain the approach for the whole book. My proposed book will speak directly to writers about how they can practice their craft and reach the goal of "telepathy".

A slightly more detailed consideration of competing books is provided on the next page.

Attached materials: Accompanying this brief prospectus are three things:
- an annotated Table of Contents showing some theme and content points for each chapter
- sample chapter 1.1 " On Bacon, Hobbes, and Newton, and the selfishness of writing well" 
- sample chapter 4.1 "Self-revision"
Capsule summary of some competing books:

- **Alley, The Craft of Scientific Writing.** States goal of clear communication well, but only about 10% (Part V) is about writing behaviours. Heavily rule-based with little about how to actually bring writing into compliance.
- **Becker, Writing for Social Scientists.** Very specific to social science/humanities, and rather dated.
- **Booth et al., The Craft of Research.** Much broader book with a lot of material on defining a research problem, bibliographic research, logical argument, etc. Only Part IV is really comparable to my proposed book. Heavily Arts-focused.
- **Day, How to Write and Publish a Scientific Paper.** Very strong detailed decomposition of parts of a paper and their function, but little engagement with writer behaviour.
- **Elbow, Writing with Power.** Very much like the book I propose in rhetorical approach: lots of direct engagement with writer behaviour. However, strongly focused on arts writing (both fiction and non-fiction). "Power" is not the same as "clarity" - the book recommends distinctive style that doesn't work well in scientific writing. Dated.
- **Harmon and Gross, The Craft of Scientific Communication.** Excellent for describing what a clear, structured article looks like, but heavily rule- and example-based without direct approach to writer behaviour. Does not include much to help someone having trouble sitting down to write or revise.
- **Katz, From Research to Manuscript: A Guide to Scientific Writing.** One of the stronger books, with good focus on practical how-to, at least in terms of lists of tasks to accomplish; however, this stops short of much engagement with the psychology of writer behaviour. Some of the style/content recommendations themselves are dubious (e.g. guidelines for figure design).
- **Lebrun, Scientific Writing: A Reader's and Writer's Guide.** Strong on considering reader reaction to writing, although without explicit behavioural process for doing so. Rather rule-based. Complex layout and structure makes it surprisingly difficult to read.
- **Matthews et al, Successful Scientific Writing.** Perhaps the closest in overall approach to my proposed book. Chapters 1 and 3 offer excellent direct engagement with writer behaviour, while other sections tend more to lists of rules and examples. Narrowly focused on biomedical fields.
- **Montgomery, The Chicago Guide to Communicating Science.** A much broader book covering talks, reports, English-second-language issues, etc; and thus less detail on writing papers. Little concrete behavioural advice.
- **Rogers, Mastering Scientific and Medical Writing: A Self-Help Guide.** Very similar to Katz: many well presented and very useful rules, but little about writing behaviour to reach compliance with them. Little about revision.
Annotated Table of Contents

The topic points listed here are intended to be representative, not exhaustive.

Part I. What this book is about

1.1 On Bacon, Hobbes, and Newton, and the selfishness of writing well.
   - "telepathy": clear, effortless receipt of your message by the reader
   - this is not something you do as a service to science (although it is that); it's what you do so that you will have readership and impact. Hence, 'selfishness'.

1.2 Genius vs. practice
   - while there are a very few "natural writers" out there, for nearly all of us writing is a craft, one that we can get better at by practicing.
   - recognizing that one is a practitioner, not a genius, can be very empowering.
   - importance of deliberate, conscious attention to writing, not just content.

1.3 What this book is, and isn't, about
   - this isn't a book about grammar rules, or citation formatting, or table layouts. It's about how an ordinary, normal scientific writer can learn to write better and better, so that his/her readers can get the message easily and go on to give the work impact.

Part II. Actually writing: behaviours

2.1 Managing your writing behaviour: Scheduling, etc.
   - including brief homage to "How to Write a Lot"

2.2 Starting
   - easing into writing to build momentum
   - integrating writing with the rest of your scientific activities

2.3 Outlining
   - informal vs. formal outlining
   - determining content: including data/analyses based on the story you want to tell, not on the total amount of work you've done.

2.4 Keeping going
   - strategies to keep momentum and evade "writer's block"

Part III. Actually writing: content and style

3.1 Rules: when to follow them, and when to break them
   - why they matter, even though this book isn't about them
   - rules matter because, and only when, they work to help achieve telepathy.
3.2 Structure and Sections
- hourglass structure and flow
- conventional and unconventional paper structures

3.3 Paragraphs
- independence, topic declarations, length, etc.
- transitions

3.4 Sentences
- active voice, sentence length and complexity, etc. (heavy nod to Strunk and White)
- importance of sentence structure that's simple and clear; avoid ambiguity or misleading (eg danglers)

3.5 Words
- vocabulary, terminology, word choice, etc. (more heavy nod to Strunk and White)
- use of jargon when it achieves clarity and thus telepathy; avoid it when it does not: 'use', not 'utilize'; but 'polyacrilimide', not 'gel'
- importance of word meanings: why Humpty Dumpty was wrong

3.6 Figures and tables
- clear design
- appropriate level of detail
- when should you use colour?

3.7 Literature Citations
- when citations are needed, and how many; and when they are not
- keeping track of citations as you write
- brief coverage of citation styles (mostly, that one defers to journal style)

3.8 Brevity
- why concision in important to publishers, readers, and writers
- some enemies of concision: redundancy, padding, jargon, parentheticals, etc. (with references back to chapters 3.2-3.6)

Part IV. Revising

4.1 Self-revision
- when not to revise: holding your nose to complete the first draft
- "self-revision" is not polishing. It's critical self-destruction and reconstruction.
- the importance of letting go: removing material that doesn't work/fit, even if it took blood, sweat, and tears to produce it
- Key: reading your MS as if you were the reader, not you. This is much harder than it sounds; discuss techniques for thinking as the reader

4.2 "Friendly" reviews
- how to get reviews from friends and colleagues, and at what writing stage
- how to use them to best advantage

4.3 Formal reviews
- what to expect from journal/press reviewers
- how journal reviews differ from "friendly" ones
- interpreting constructive reviews
- how apparently unconstructive reviews are actually constructive too

4.4 The "response to reviews"
- possibly the most important part of a resubmission
- how to write one that makes it easy, if not irresistible, for the handling editor to accept your paper

Part V. Miscellaneous

5.1 Managing coauthorships
- how to write and revise as part of a team
- determining who merits authorship, and what order authors are listed

5.2 The next project
- maintaining momentum and bridging one writing project to the next