**Book Review**

**Chatfield, T.(2022) *Critical Thinking: Your Essential Guide.* London: SAGE Publications Ltd.**

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For at least 60 years it has been recognised that students perform better if they take a more critical approach to their studies (Flecker, 1959), and, more recently, critical thinking has become ‘a defining characteristic of university education’ (Ahern *et al*., 2012, 125). In essence, this book is a clarion call for its readers to spend more time challenging and expanding their own views rather than always believing what they hear, read or see, and only seeking confirmation of their existing beliefs. For me, critical thinking seems to be a broader version of scientific thinking whereby laboratory experiments are deliberately designed to disprove pre-existing hypotheses; other academic disciplines may also have their own terminology.

*Critical thinking: Your Essential Guide* is a learner-focussed book designed as an aid to developing reading and writing abilities and so to facilitate becoming a more effective communicator and consumer of the work of others. Tom Chatfield, a philosopher and broadcaster, has produced a book that is richly illustrated with examples, informative summaries and thought provoking questions. However, it is more than simply a self-help guide because it also provides rationales for the various approaches which are advocated ‘to make the most of the astonishing resources at our fingertips’ (p. 3). The book is divided into two sections with the first devoted to developing reasoning and logic, and the second to applying those processes to sift through the vast array of biased and conflicting information currently available in hardcopy and digital form.

In the initial part of the first section of the book, the difference between assertions, explanations and arguments is clearly explained. Whereas assertions are just bald statements, explanations need to be well-reasoned, sufficiently detailed and without irrelevances in order to be meaningful. They are more than opinions, examples or clarifications in that they should provide rational justifications of assertions and, in this way, the combination of an assertion and its explanation becomes an argument designed to modify the opinions of the listener or reader. It is important, however, to distinguish such reasoned arguments from rhetoric that attempts to persuade solely through emotional appeals. In this part different types of reasoning are considered with a particular focus on the merits and pitfalls of deductive, inductive and abductive approaches. If not used with care, each of these types of reasoning can lead to flawed conclusions. Hence guidance is provided on clearly identifying the explicit and implicit premises on which any argument is based together with how to verify these premises and whether they provide support to the argument independently or in combination; in the latter case the whole argument fails if any one premise is flawed.

More broadly, a vital aspect of critical thinking is realising that sound logic by itself cannot establish truth and so the book considers the perils of generalisation from a limited number of previous occurrences albeit that this is sometimes necessary to develop the best possible hypotheses and theories. Such hypotheses can then be tested using research methodologies designed to assign probabilities and to distinguish between correlation and causation, and, there follows a discussion of the relative value of different types of evidence including the reliability of primary and secondary sources together with guidance concerning different reading techniques which can be used to enhance understanding.

The second section of the book explains the practical usage of the approaches previously described in the first part. While all human communication is designed to change thinking or behaviour, the recipient chooses how they will respond and they do this only after making judgements regarding the quality of the message. Hence, a variety of responses are possible and, through critical thinking techniques, we can all become enabled to challenge the prevalent rhetoric, faulty reasoning and bias present in many of the currently available information sources so become better communicators ourselves with improved clarity and greater impartiality. While some of this content covers similar ground to that of the first section, the focus of all the second section chapters is to develop the reader’s own critical thinking rather than simply to describe critical thinking itself.

This part of the book proposes that the best persuasive communication goes beyond reasoned argument and credible evidence to include emphasising the importance of the topic in its current context. Hence some rhetoric is an integral part of most academic and professional communication, but it is important to balance this with rationality, and to avoid unnecessary technical jargon, buzzwords, euphemisms, hyperbole and negative rhetoric since any of these could alienate anyone with strong opposing views.

Other parts of the second section highlight different types of faulty reasoning, bias and how technology can be used critically. In relation to reasoning, the book notes the pitfalls of seeking support for arguments through enlisting commonly held public beliefs, high profile individuals with limited experience of the field, false dilemmas, circular reasoning or prejudice. In essence, critical thinking entails appreciating that different views from your own may actually be correct and this is done by suspending our thinking shortcuts based on emotional preferences and previous experience that we often use to make rapid decisions. Unexpected results should always be questioned especially when they occur in a small number of instances and so may be unrepresentative.

Finally, the book notes that, human nature is not the only source of bias; we also need to consider bias induced by information systems which encode and retrieve their data in particular ways. While critical thinking requires us to seek alternatives, algorithms typically identify similarities, and accuracy also suffers because novices and those with malicious intent often contribute to online information on an equal standing to experts. More positively, however, IT, when we look beyond the first page of any internet search results, can facilitate access to a wider diversity of authentic collaborators. However, this requires time and effort and we should avoid the undue influence of popularity by always combining searching, i.e. finding out what we think we need to know, with discovery, i.e. exposing ourselves to diverse perspectives both online and in person.

Overall, this is an interesting book with an appealing writing style. If you are seeking a research monograph about the latest developments in critical thinking, this is not the book for you, but it is worthwhile and straightforward reading for students and anyone else beginning their academic or professional career or who is feeling overwhelmed by the prospect of understanding and managing the plethora of information associated with their chosen discipline. While the book is 360 pages long, its reader focus, clear guidance on a variety of topics, summaries, study guides and online resources make the text easily understood and a good learning resource. The book ends with a bibliography of further reading, a detailed glossary of terminology, a synopsis of valid forms of argument, chapter specific endnotes and a useful index. I benefitted from reading this book and you could as well.

**References**

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