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What it Means to be Critical

Keywords

academic traditions; critical reading; discernment; scepticism; self-critical writing

You may already be a more critical reader than you realize. Take a look at this fictional advertisement and think about how you would respond to it.

WHY DO IT THE HARD WAY when you can be rich NOW!!!

It took me five years to make my first million. I made my second million in six weeks. Now I just can't stop making money. I own four luxury villas on three continents, five top-of-the-range sports cars and my own helicopter. Most important of all, the financial security of my family is ensured.

Now I want to share my good fortune with you. By following my simple instructions you too can be a millionaire within just a few months. There is no risk and it just can't fail. I have already helped hundreds of people attain their dream of

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a new life. They are so grateful to me – no longer do they worry about domestic bills, healthcare or their children's education. Their future is certain. And yours can be too.

Just call me on the number below, and I will send you my introductory pack *free of charge*. It will explain to you how my failsafe method can bring you guaranteed wealth and happiness. Call now, and let your life change forever for the better.

The advertisement promises to make you a millionaire. Would you call the phone number? If not – or if you are not sure whether you would – why is that? The introductory pack is free. Your financial worries could soon be over. What would stop you picking up the phone?

The fact is that we do not necessarily take everything we read at face value, nor should we. Our life's experiences make us suspicious of advertisements like this. We might ask: 'Are you as rich as you claim? Why do you want to help people you have never met? Is your method legal and ethical? Is there really no risk? Would I just end up making you richer, at my own expense? If your method is so wonderful, why have I never heard of it before? What will you do with my personal details once I give them to you? How much will the phone call cost?'

These are all critical questions. They indicate that you can see more in a text than is presented on the surface. You are looking for a hidden agenda, the author's real purpose. You are relating what you read to what you already know about the world. It is a sad reflection upon that world, perhaps, but we rarely expect to get something for nothing and we sometimes expect that people will try to trick us.

Learning to be critical in academic enquiry

Academic writing is generally much more benign. We do not normally expect authors to be lying or trying to swindle us. But that does not mean there are not hidden layers to an academic text. A critical approach to the reading of a journal article or book is therefore essential if we are to assess the value of the work it reports. Certain expectations underpin the way in which academic writing operates. The most fundamental expectation is that any claim will be backed up by reasons based on some form of evidence. So, the reader asks at every point: 'Have you given me sufficient grounds for accepting your claim?' Such a question need not imply that authors are

untruthful. In most fields of enquiry it is not a matter of truth, but of viewpoints, interpretation and significance. As readers we are attempting to find common ground between our own understandings and beliefs, and those of the authors. That can only be done by thinking about the extent to which the claims and supporting evidence in a text – which satisfied the authors – also satisfy us.

Since each person has different knowledge and experience, it is sensible for the reader to adopt a critical frame of mind that maintains a distance from, and friendly scepticism towards, what authors say. In reading an academic article, we might keep in our mind these sceptical provisos:

- The authors mean to be honest, but may have been misled by the evidence into saying something that I consider untrue.
- The authors mean to be logical, but may have developed a line of reasoning that contains a flaw.
- The authors mean to be impartial, but may have incorporated into the account some assumptions that I don't share.
- The authors mean to tell me something new, but may not have taken into account other information that I possess.

Reasonable scepticism means being open-minded and willing to be convinced, but only if authors can adequately back their claims. It entails striking a balance between what one expects and what one accepts. No study can achieve everything. The critical reader is not put off by the limitations of a study, but will expect authors to interpret their investigation in a way that takes account of those limitations. Accomplished authors will clearly signal to the reader the basis for their conclusions and the confidence they have in any generalizations they make.

Most novice critical readers take a while to learn how to interpret authors' signals, and to work out how to respond to them. Often, part of the learning process is that one goes too far towards one or both extremes – uncritical acceptance or overcritical rejection of authors' claims – before finding a happy medium. Learning the knack of reasonable scepticism is, of course, particularly challenging because published material does vary in its rigour and reliability.

To assess your current ability to evaluate what you read, consider the short (fictional) extract below from a paper published in 2005 by someone we have called Browning. What questions might you, as a critical reader, ask of the author in relation to the claims made? The account refers to a study where some children were taught to read using the *phonics* method (sounding out words on the basis of the component letters) and others were taught using the *whole word* method (learning to recognize and pronounce complete words).

> In the reading test, the five children who were taught to read using phonics performed better overall than the five children taught using the whole word method. This shows that the phonics method is a better choice for schools.

Your questions might include:

- Is a study of just ten children sufficient to draw such a strong conclusion?
- What does 'performed better overall' signify? Did some children taught using the whole word method perform *better* than some children taught using phonics? If so, what does this mean for the results?
- Were the differences between the two groups sufficiently great for us to be satisfied that they would occur in a re-run of the experiment with different subjects?
- How were the two teaching programmes administered, and might there have been 'leakage' of whole word teaching into the phonics teaching and vice versa?
- What was the reading test actually testing, and might it have been unintentionally biased to favour the children taught using phonics?
- What care was taken to check how parental involvement at home might have influenced what and how the children learned?
- Were the two sets of five children matched for intelligence, age, gender or other factors?
- Is it reasonable to infer that what works well in a small experimental study will work well in school environments?
- How does Browning envisage phonics being used in schools? Would there still be a place for the whole word method?

Some such questions asked of a short, decontextualized extract like this will almost certainly be answered elsewhere in the text. That is where to look first. But other questions may remain unaddressed, leaving you to seek your own answers or to consider the risk entailed in accepting the report without answering them. Suppose the text is central to your study for an essay, so that you want to comment on it in detail. Then you will need to include some account of the weaknesses that your critical questions raise, as a balance to your description of what the authors are claiming. Here is an indication of how, in an essay, you might comment on a published text that is useful, but not perfect.

> Browning (2005) found that children taught to read using phonics did better in a reading test than children taught using the whole word method. However, the study was small, the test rather limited, and the subjects were not tightly matched either for age or gender. An examination of Browning's test scores reveals that, although the mean score of the phonics group was higher, two of the highest scorers in the test were whole word learners. Since this indicates that the whole word method is effective for some learners at least, Browning is perhaps too quick to propose that 'the phonics method is a better choice for schools' (p. 89).

Your critical reading of others' work will usually be in preparation for producing your own written text. This marriage of reading and writing has many benefits. First, you will develop a sense of what is and is not a robust piece of research – essential when you come to plan your own empirical investigation (for a dissertation, say). Second, you will soon begin identifying where the existing research has left a gap that your investigation can fill. Third, the attention you pay to different authors' texts will naturally affect the quality of your own writing. You will soon:

- demand of yourself evidence to back up your claims;
- be alert to the possibility of making an illogical jump in your reasoning;
- become sensitive to your own assumptions and how they might affect your claims;
- realize the importance of checking the literature thoroughly to ensure that your understanding is sufficiently deep.

In short, you will develop a mature academic style of writing that is both fair and discerning in its accounts of others' work, and that maximizes the opportunity for others to take seriously what you have to say.

The skill of critical reading lies in assessing the extent to which authors have provided adequate justification for the claims they make. This assessment depends partly on what the authors have communicated and partly on other relevant knowledge, experience and inference that you are able to bring into the frame.

The skill of self-critical writing lies in convincing your readers to accept your claims. You achieve this through the effective communication of adequate reasons and evidence for these claims.

Academic traditions and styles

All academic traditions require a critical engagement with the works of other scholars. However, some traditions emphasize it more than others. Depending on where you have been educated till now, you may have been encouraged to take predominantly one or another approach to what you read and write. Let us point to the opposite ends of a particular dimension in these traditions: student-centred learning versus knowledge-centred learning. Both have a role for the balanced learner, but neither should be taken to an extreme. Table 1.1 illustrates what can happen at the extremes, and how mature academics must strike a reasonable balance between their own ideas and those

of others. Try using these descriptions to help you judge where your educational experience has located you on the continuum.

Table 1.1 Targeting an effective balance between different academic traditions

Too student-centred (values imaginative thought even if not fully grounded in established theory and knowledge.)	Target balance (appropriately reflects fair and constructively critical reading.)	Too knowledge-centred (values traditional wisdom over the views and experience of the academic apprentice.)
Too easily dismisses the expertise of others.	Assumes authors are knowledgeable, while remaining alert for possible flaws in the reasoning.	Takes too much at face value.
Fails to see the big picture.	Juxtaposes the overall picture with the specifics of particular situations.	Fails to see implications of generalized ideas for a specific context.
Underestimates the task of becoming truly knowledgeable about a model or idea.	Is prepared to criticize a model or idea, while retaining a sense of what authors might say in reply.	Believes it is sufficient to be knowledgeable about a model or idea.

The purpose of student-centred learning is to help individuals gain confidence in developing their own ideas, achieved by using existing knowledge as a stepping stone on the way to originality. In knowledge-centred learning, individuals are encouraged to become aware of existing scholarship and to value it above their own ideas as a novice. Ultimately, both traditions are aspects of the same thing: individuals make a personal effort to contribute something new to an existing bank of respected knowledge. However, the assumptions underlying each tradition do make a difference to how scholars operate. Typically, the rhetoric of the western-style tradition emphasizes the importance of the individual. Western-educated students can easily over-interpret this emphasis and forget to give sufficient importance to the work of others. In contrast, non-western-educated students may be intimidated by the sudden emphasis on what they think.

The term ‘critical reading’ is often associated with individuals trying to show why their own interpretation of some idea or observation is better than someone else’s. It may seem, then, that someone from a student-centred learning tradition is at an advantage in learning to be a critical reader. Not necessarily. Students from both traditions bring something useful to the task and have pitfalls to avoid. The techniques introduced in this book bring together skills from each tradition.

Being critical as a requirement of academic study

Just what is expected in postgraduate study? Here is an example description of key skills.

> Critical thinking and creativity: managing creative processes in self and others; organising thoughts, analysis, synthesis, critical appraisal. This includes the capability to identify assumptions, evaluate statements in terms of evidence, detect false logic or reasoning, identify implicit values, define terms adequately and generalise appropriately. (Extract from 'Skills for all Masters programmes', subject benchmark statement from the *Masters Awards in Business and Management*, Quality Assurance Agency for Higher Education (UK), www.qaa.ac.uk/academicinfrastructure/benchmark/masters/MBAintro.asp)

The critical skills here can be boiled down to the capacity to evaluate what you read and the capacity to relate what you read to other information. Applying these skills to any academic text involves looking out for its potential strengths and weaknesses.

Evaluation is important. If knowledge was simply a set of facts, we could take all that we read at face value. However, knowledge is only partly about the facts themselves. Knowledge also entails their *interpretation* and the use of past facts to help us make predictions about future facts. It often also entails the *evaluation* of facts against certain assumed values. For instance, it was assumed in the earlier discussion about phonics and whole word reading that it is desirable for children to learn to read efficiently and effectively. If you take away that assumption, the facts will be open to different interpretations. It can be a shock to the university student when first discovering that facts can be interpreted in diverse ways, leading to very different predictions about what will happen in the future, or judgements about what should happen.

The critical reading of a text is rarely about questioning the facts. Mostly it is about assessing the quality of the case that has been made for interpreting and evaluating the facts in some way. Thus, the critical reader is interested in whether there is sufficient evidence to support a claim, whether there is another possible interpretation that has not been considered, and perhaps whether the authors have argued convincingly that their interpretation applies to other cases.

The critical reader can achieve this by focusing on several potential objects of scrutiny. They include:

- the evidence provided in the account;
- whether the reasoning of the author's argument follows logically to the conclusion that has been drawn;

- explicit or implicit indications of the author's values and assumptions;
- the match between the author's claims and those of other authors;
- the match between the author's claims or predictions and the reader's own research evidence or knowledge.

To engage thoroughly with a text, the reader ideally needs to have a clear understanding of what the authors are doing, sufficient knowledge of the field of enquiry and (where possible) reliable evidence of his or her own, or at least some reliable intuitions about the way things work in the real world. But no readers have the necessary time or expertise always to put themselves in this advantageous position. The art, then, is to know how far to go with any text. This, in turn, will depend on how central the text is to the study activity that one is involved in, and one's goals in reading it. Maintaining a sense of why you are reading a text makes evaluating it much easier.

Task-driven critical reading

It should always be possible beforehand to state why you are going to read a book or journal article. Reasons might be:

- You have been told to read it in preparation for a class.
- You are doing background reading on your subject, just to get your bearings.
- It reports a particular approach or technique that you want to see in action.
- It addresses a particular question that you want to know the answer to.
- You are looking for evidence to counter-balance something else that you have read.
- You have a particular story to tell, and you need some supporting evidence for it.

Irrespective of your reason for reading a text, it is worth having one or more questions in mind whose answers will help you progress your own work. A broad question addressed to the author such as 'What did you do, and what did you find out?' will be best answered with a straight description of the content of the paper. However, more finely tuned questions will help you focus on specific issues, while automatically providing a direct route into critical reading. For example: 'Is this author's method of investigation the best one for me to emulate in my own work? How does this author's position compare with that of another author whose work I've read? Would this author challenge the claims that I am making in my own work?'

After the initial background reading stage, you will rarely have the luxury of reading for reading's sake. There is simply too much literature out there. You will have to choose what to read and how thoroughly you read it. Your choices will be based on your best guess about what you might use the

information for: usually some written task of your own. So the questions you bring to the text, as illustrated above, can guide your decisions on what to read and in how much depth.

It may seem a bad idea to decide, *before* you read something, what you are going to get out of it. How can you know until you have finished reading? If you start with a particular question, might you be inhibited from seeing what else the material has to offer? The danger is less than it may seem. If you are alert, you will notice other things that are relevant to your task, even if you did not expect to find them there. The single-minded approach will help you to separate out the different kinds of information you are seeking and deal with them at the right time.

Imagine you are reading a paper reporting a questionnaire study because you are seeking hints on how to design your own questionnaire. While reading, you realize that one of the results of the study has a bearing on your research. The fact that you already have a focused question regarding the study design will encourage you to make a note to return to the paper later, when you are specifically working on a data-related question. Doing so will help you avoid distracting yourself from the matter in hand so that you end up achieving neither task properly.

This disciplined strategy means that you sometimes read the same work more than once, for different purposes. It also means that any notes you make on that work will tend to be in different places, under topic headings, rather than in the form of a single, bland and unfocused summary of what the paper says.

Linking critical reading with self-critical writing

One person's writing is another person's reading. Whatever you write as a student will be read critically by your assessors. If you progress to writing for a conference presentation or publication, anonymous reviewers and then the general academic community will also be critical readers of your work. A secret of successful writing is to anticipate the expectations and potential objections of the audience of critical readers for whom you are writing. So you must develop a sense of who your readers are and what they expect. What you learn from this book about the techniques of critical reading in the academic context can be directly applied to making your own academic writing robust for other critical readers like you: intelligent, well-informed and fair-minded, ready to be convinced, but expecting high standards of scholarship and clarity in what they read.

As you work through this book, identifying effective ways of interrogating what you read, you will find that some of the techniques are familiar because

you already use them. Others you will now be able to apply for the first time. If you need certain things in what you read, it makes sense that you should supply them to your target audience in what you write. If you want clarity, then you yourself should be clear. If you need authors to be explicit about their assumptions, then you should be explicit about yours. If you want authors to provide evidence to support their claims, then you should provide evidence for your own.

No two readers want quite the same things, and you will probably never fully anticipate all of the requirements and preferences of your assessors. But you can get a long way towards that goal. How far have you progressed so far in becoming a critical reader and self-critical writer? Try the exercise in Table 1.2.

Table 1.2 Linking a critical approach to your reading with a self-critical approach to writing

How critical a reader and self-critical a writer are you already?

A Tick each element of critical reading in the list below that you already employ when you read academic literature.
B Tick each element of self-critical writing that you already employ when you write. (You may find it helpful to look at assessors' comments on your past work, to see what they have praised and criticized).
C Then add up the number of ticks for each column, and consider your response to our statement at the end of the exercise.

Element of critical reading		Element of self-critical writing	
When I read an academic text I:	[Tick]	**When I write an academic text I:**	[Tick]
1 try to work out what the authors are aiming to achieve;		1 state clearly what I am trying to achieve;	
2 try to work out the structure of the argument;		2 create a logical structure for my account, to help me develop my argument and to help the reader to follow it;	
3 try to identify the main claims made;		3 clearly state my main claims;	
4 adopt a sceptical stance towards the authors' claims, checking that they are supported by appropriate evidence;		4 support my claims with appropriate evidence, so that a critical reader will be convinced;	
5 assess the backing for any generalizations made;		5 avoid making sweeping generalizations;	
6 check how the authors define their key terms and whether they are consistent in using them;		6 define the key terms employed in my account, and use the terms consistently;	
7 consider what underlying values may be guiding the authors and influencing their claims;		7 make explicit the values guiding what I write;	
8 keep an open mind, willing to be convinced;		8 assume that my readers can be convinced, provided I can adequately support my claims;	

Table 1.2 (Continued)

Element of critical reading		Element of self-critical writing	
When I read an academic text I:	[Tick]	**When I write an academic text I:**	[Tick]
9 look out for instances of irrelevant or distracting material, and for the absence of necessary material;		9 sustain focus throughout my account, avoid irrelevancies and digressions, and include everything that is relevant;	
10 identify any literature sources to which the authors refer, that I may need to follow up.		10 ensure that my referencing in the text and the reference list is complete and accurate, so that my readers are in a position to check my sources.	
Total number of ticks		**Total number of ticks**	

The more ticks you have for both columns, the further you have already progressed in becoming a critical reader and self-critical writer. Look back at any items that you have not ticked. Consider how you might incorporate these elements of critical reading and self-critical writing into your habitual approach to study.

In Table 1.2 we have highlighted the link between elements of critical reading and their counterparts in self-critical writing. Whatever you look for as a critical reader of literature, your assessors may also look for in your writing when judging how far it meets their assessment criteria. The elements of self-critical writing relate to meeting the needs of your readers, so that they can grasp what you are trying to communicate. But just as importantly, they enhance your capacity to make your argument convincing to your readers. This is why developing a strong sense of your audience is to your advantage. Meeting your target readers' needs and convincing them will help to ensure that your account meets the assessment criteria. During your studies, you will find it useful to refer back to this exercise occasionally, to monitor your progress in developing critical reading and self-critical writing skills.

Where now?

Having discussed how to make the most of what you read, the next step is to consider how to select effectively from the vast array of literature available. That is the topic of the next chapter. Then, in Chapter 3, we introduce the basics of critical reading, in the form of five Critical Synopsis Questions that you can ask of a text. Chapters 4 and 5 use these insights to introduce some simple techniques for self-critical writing: presenting your own ideas in a well-supported way. Part One thus prepares you for the more detailed engagement of Parts Two and Three, where we revisit the same approach at a more advanced level.