Critical thinking

When you seek, analyse and weigh up (evaluate) information for a particular purpose, you are engaging in critical thinking. If you check alternative sources when planning a working holiday overseas, or buying a mobile phone package, you are engaging in critical thinking. Your task at university is to develop this ability within the peer-reviewed sources of your academic field.

Being able to analyse how a piece of writing or other text (speech, lecture, video, and so on) is structured and to interpret how it uses language, evidence, assumptions and argument to make its point, are vital skills for you as a student.

This quote summarises the key aspects of critical reading:

**What is meant by critical?**
At university, to be critical does not mean to criticise in a negative manner. Instead, it requires you to question the information and opinions in a text and present your evaluation or judgement of the text. To do this well, you should attempt to understand the topic from different perspectives (i.e. read related texts) and in relation to the theories, approaches and frameworks in your course.

**What is meant by evaluation or judgement?**
Here you decide the strengths and weaknesses of a text. This is usually based on specific criteria. Evaluating requires an understanding of not just the content of the text, but also an understanding of a text’s purpose, the intended audience and why it is structured the way it is.

**What is meant by analysis?**
Analysing requires separating the content and concepts of a text into their main components and then understanding how these interrelate, connect and possibly influence each other.

From “Writing a Critical Review,” University of New South Wales.

Source Validity

There are many sources of information in our world: films and videos, online articles from Google Scholar, information and articles from websites, books and journals. Not all these are unbiased and argued on valid evidence. The ACU library provides online access to a wide range of databases, and these should be used extensively.

The question to be asked is whether the information can be believed—is it valid? It is important to step back from a particularly persuasive text or film and to consider alternative perspectives or arguments. Part of reading other sources is to find out the similar or opposing views that exist on a subject. Validity is also measured in terms of whether an article has been reviewed by authoritative persons in the field and contributes to knowledge in that field. A source such as Wikipedia is built by a community of peers in various fields—but it is a very general online encyclopaedia and does not engage in a rigorous process of peer review within those fields. **Do not use Wikipedia as a reference.** Many sources of information can help you build a basic understanding, but you need to move to a deeper knowledge by looking at peer-reviewed articles, and books by credible authors.

Additionally, you need to look at when the information was published and judge whether the findings are still valid or now changed because of more recent, published research. This does not mean you will not refer to authors that are somewhat dated, but the choice to include them will be because they have made
a notable contribution to the thinking in your field, and you will need to read further to see how more recent publications are built on the earlier propositions and findings.

Another way of determining validity is to look at how often an author is cited positively by others in your field. The more they are cited positively, the higher the validity and reliability.

**Source Reliability**

<table>
<thead>
<tr>
<th>Most Reliable</th>
<th>Reliable</th>
<th>Potential Bias/ Dubious</th>
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<tbody>
<tr>
<td>• Peer reviewed journal articles</td>
<td>• Journal Articles</td>
<td>• Newspapers</td>
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<tr>
<td>• Government documents</td>
<td>• Textbooks (make sure they aren’t out of date)</td>
<td>• Online newspapers</td>
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<tr>
<td>• Published conference proceedings</td>
<td>• Industry magazines (although watch for bias here)</td>
<td>• Corporate, private source documents</td>
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<td>• Industry organisation publications e.g. WHO, UNESCO, CPA</td>
<td>• Wikipedia</td>
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<td>• Web-pages, blogs, web-articles</td>
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Shannon Kennedy-Clark, ACU

**NB.** Some articles on the web have been published elsewhere such as in a peer-reviewed journal. It is wise to cross-check the publishing details. Most of the articles found on Google Scholar have full referencing and publishing information.

**Practical Tips for developing a Critical Mind at university**

- Your critical response is not a summary or paraphrase of a text or the notes you may have taken from a lecture—or even just presenting your opinion. When you take notes or summarise, it is a good habit to include questions you may have about what has been said.
- Prepare questions before reading or viewing media so you are not only seeking to understand the author’s argument but reviewing as you go. You need particularly to review the evidence supporting the arguments and be explicitly aware of the writer’s perspective.
- Are you also able to question and challenge ideas presented? This process can only happen after you have analysed the argument, evidence, and sources for a text. How valid are the sources?
- Are you able to step back from a particularly persuasive text or film and consider alternative perspectives, arguments? Part of reading other sources is to find out the similar or opposing views that exist on a subject.

**Text Examples**

On the next pages, there are two texts of different complexity and genre which have been analysed critically to help you see the structure/organisation of argument, and the language features:

Critical Analysis 1: Editorial – Mob Rule on Craig Thomson

Critical analysis is about analysing a piece of writing or other text (speech, lecture, video), in terms of its structure, use of language, evidence, assumptions and argument. This handout explores one way in which you can approach critical analysis.

**Organisation/Structure**

- **Headline and Illustration:** Summarises the author’s view on the issue.
- **Introduction:** The author orientates the audience and outlines his stance/thesis.
- **Body:** The author outlines the evidence and main arguments of his thesis.
- **Conclusion:** The author summarises his arguments and restates his thesis.

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**Genre:** Editorial in a Public Affairs Magazine (Eureka Street).

**Language features**

- **Headline contains short words, no qualifiers:** A strong presentation of the author’s point of view.
- **Use of ‘I’ in the introduction:** Clearly the author’s opinion.
- **Use of quote:** To support the author’s point of view.
- **Generalisation:** ‘Rules in general’ – a persuasive tool – presents the author’s point of view as fact. ‘More often than not’ strengthens this generalisation.
- **Persuasive language:** ‘particularly incumbent’ (suggests a strong obligation) – focuses and strengthens the author’s position.
- **Use of contrasts and qualifiers:** ‘but’, ‘by contrast’, ‘little more’. Add depth and strength to the argument.
- **Quote from authoritative source:** Supports author’s viewpoint.

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**Mob rule on Craig Thomson**

MICHAELE MULLINS MAY 27, 2012

Last week I received an email from a friend who has made a new life in Australia. She complained that Australian officials 'have a tendency to follow the letter of the law and refuse to think outside the box'. But she considers that a small price to pay for the increased wellbeing her family enjoys living in this country. She wrote:

> Coming from a relatively lawless country, it has been difficult to adapt to the opposite scenario, where rules control people rather than the other way around. But, having said that, this is what makes Australia a functional, effective, efficient, law-abiding place, and it is precisely the reason we chose to move here.

**Rules in general, and the rule of law in particular, promote the common good ahead of sectional interests. More often than not, refugees have fled lawless societies in search of the protection of the law. A well functioning rule of law is a haven for people of good will.**

It is particularly incumbent upon politicians to respect the judiciary. But on Thursday our neighbour Papua New Guinea took a significant step along the road from the rule of law to dictatorship. Prime Minister Peter O'Neill had the country's chief justice Sir Salamo Injia arrested and charged with sedition. Sir Salamo had upheld a significant ruling that did not serve the personal interest of the prime minister and instead benefited his rival Sir Michael Somare.

**By contrast,** Australian Prime Minister Julia Gillard did little more than express disappointment last August when the High Court ruled unlawful her government's Malaysia solution, which it was relying upon to arrest the drift of political support from the Government to the Opposition.

Former Chief Justice Sir Gerard Brennan reflected in 1997:

> Should a judge be accountable to the government of the day? Certainly not. Should the judge be accountable in some way to an interest group or to the public? The rule of law would be hostage to public relations campaigns or majoritarian interests. Should a judgment be fashioned to satisfy popular sentiment? That would be the antithesis of the rule of law.

Judgment of Craig Thomson **should** wait for the decision of a judge in a court of law. However, popular sentiment and a populist Opposition have taken hold of the judgment of Thomson to the extent that a judge deciding not to convict him **might almost** expect the fate of PNG's Sir Salamo Injia.

**The first consequence of mob rule is injustice to an individual. But once it takes hold, the real casualty would be Australia's status as a desirable place to live. Migrants and refugees would no longer see Australia as the place to come to enjoy the protection afforded by the rule of the law. The politicians could finally have their wish because the boats might stop.**

Michael Mullins is editor of Eureka Street.
Now, let us look at some key questions\(^1\) to help you analyse the structure and function of the text.

An editorial, as above, presents an argument which is taken to be the Editor’s own views, in this sequence:

- in the Introduction, a description of a current issue, in context, and the Editor’s stance on that issue
- in the Body, evidence for the Editor’s thesis
- in the End, a restatement and summary of the Editor’s argument.

The answer provided for each question below is gleaned from the above article.

1. **Author’s purpose**

   What is the purpose of the author, and to what extent has the purpose been achieved? Is there anything missing/ not stated?

   In the case of the article above, the author’s purpose is to persuade the reader that the popular treatment of Craig Thomson is against the rule of law, and that a deviation from the rule of law has a negative effect on the common good. He does not outline the accusations that have been made against Thomson, nor does he discuss the details of the case. He assumes that the reader knows this. His intention is to discuss the broader implications of Thomson’s treatment in the wake of the accusations.

   As you become more familiar with scholarship in your field, you may also ask the following questions of texts:
   - What does this text add to the body of knowledge in the field?
   - What relationship does this text bear to other works in the field?

2. **Methodology**

   What approach was used for the research underlying the text, and how objective is this approach? (Approaches used could include quantitative or qualitative research, analysis/review of theory or practice, comparative studies, case studies, personal reflection, etc…)

   To support his argument, the author uses analysis and review of current practice. He reviews some examples of current practice that move in opposition to the rule of law, in order to demonstrate the implications of Thomson’s treatment.

   As you become more familiar with scholarship in your field, you may also ask the following questions in order to assist you with your analysis of the text:
   - Are the results of the research valid and reliable?
   - What analytical framework is used to discuss the results?

3. **Argument and use of evidence**

   What is the argument? How clearly and consistently is the argument made? What claims does the author make in relation to the argument? What assumptions are made by the author?

   What kinds of evidence does the author present? How valid and reliable is this evidence?

   What conclusions are drawn? Are these conclusions justified?

   The author’s argument rests on examples in Australia and Papua New Guinea where the lack of adherence to the rule of law has had implications for the good of the individual and the common good of society. Citing a letter he received from a friend, he poses the argument that the reason Australia attracts refugees and immigrants is because Australia usually upholds the rule of law.

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\(^1\) Questions sourced from Pam Mort, Lyn Hallion and Tracey Lee Downey, “Writing a Critical Review” (brochure, The Learning Centre, University of New South Wales, 2005).

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An underlying assumption behind the author’s argument is that the rule of law cannot be party-political, that is, it cannot be used simply to serve the good of the government. Drawing on evidence in Papua New Guinea where politicians did not uphold the rule of law, and an example in Australia, where the Gillard government acted within the rule of law, the author demonstrates that this ideal is an important tenet of Australian society. To lend further weight to his case, the author uses an authoritative source (Chief Justice Brennan), as a warrant for the claim that people treating Craig Thomson unfairly are acting unlawfully (by conducting a trial by media).

In his concluding statements, the author makes the claim that the treatment of Craig Thomson by the people and the media indicates that the rule of law in Australia is under threat; injustice to one citizen could lead to the collapse and destruction of the rule of law. He provides a final argument that the Opposition and the people of Australia are treating Thomson unfairly, by not waiting for his judgment in a court of law, and presents the imagined scenario where the Opposition and the people might arrest any judge who makes a judgment opposed to their wishes.

As you move further into your studies, the arguments you encounter will become more sophisticated and complex. You may also need to ask the following questions of the text:

• What is the central hypothesis?
• Are there any problems with the argument or the evidence presented?

4. Writing style / language

How does the author use language to persuade the reader to his/her point of view?

In addition to a discussion on the use of language outlined in the table on the first page of this document, we could add the following:

Persuasive and emotive language is used throughout the article. Discussing the rule of law, the author generalises that rules are designed to “promote the common good.” This phrase is used deliberately to conjure a particular image in the mind of the reader, serving to alarm the reader as to the consequences of not living according to the rule of law. Language features that focus and strengthen the argument, such as the use of obligatory terms (‘should’, ‘incumbent upon’), and the hypothetical situation outlined in the conclusion (whereby a judge could be arrested for ruling contrary to popular opinion), serve to further cement this argument in the mind of the reader.

As you become more familiar with your field, you may also ask the following questions in order to assist you with your analysis of the text:

• Who is the intended audience, and does the writing style suit this audience?
• How is the text organised? What effect does this structure have on the reader?
Critical Analysis 2: Mental Health Issues for Rural and Remote Australia

While this article is quite different to the previous one, in terms of style, tone and audience, it can be analysed in much the same way. Some of the questions we ask, however, may require deeper, more critical thinking.

<table>
<thead>
<tr>
<th>Organisation/Structure</th>
<th>Genre: Academic paper for a peer reviewed journal.</th>
<th>Language features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
<td>Clearly identifies the focus of the paper.</td>
<td>Title references the thesis: A strong title, with a qualifier (‘for’) that introduces the central thesis.</td>
</tr>
<tr>
<td>Abstract:</td>
<td>Summarises the argument and key points of the paper.</td>
<td>Begins by citing research: Sets the tone for the paper and introduces the argument.</td>
</tr>
<tr>
<td>Introduction:</td>
<td>The authors orientate the audience and outline their purpose.</td>
<td>Use of emotive language in the introduction: ‘distress’, ‘cause of concern’, ‘acute’, ‘chronic’ - a persuasive tool, designed to alarm and orientate the reader towards the argument.</td>
</tr>
<tr>
<td>Body:</td>
<td>Outline of evidence and main arguments.</td>
<td>Presentation of facts: Opinions are presented as facts throughout sections one and two, with each opinion closely followed by key research.</td>
</tr>
<tr>
<td>Section headings:</td>
<td>act as signposts to direct the reader through the argument: section one – literature review and critique; section two – discussion of current practice; section three – recommendations for future strategies and research.</td>
<td>Use of sources: Notice that the authors do not use quotes; instead, they paraphrase key sources to support their argument.</td>
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<tr>
<td></td>
<td>Each section reads like a mini-thesis: argument/ theme, followed by evidence, critique, then a concluding statement and an introduction to the next section.</td>
<td>Critical analysis: ‘interpreted with caution’ (p.255), ‘formal evaluation’, ‘dissatisfaction’ (p.256) – denote the beginning of the critique of previously discussed research.</td>
</tr>
<tr>
<td>Conclusion:</td>
<td>Summary of arguments and restatement of thesis.</td>
<td>Comparative language: ‘changed’ (p. 255), ‘broader focus’ (p. 256) – used to compare past research and demonstrate motion towards authors’ recommendations.</td>
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</tbody>
</table>

Access from Wiley Online Library (via ACU Library)

- Please download the article from the link above and find the sections under both Organisation/Structure and Language Features.
- The page numbers are given on the left under Language Features.


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Now, let us look at some key questions to help you analyse the structure and function of the text. Again, the answer provided for each question is gleaned from the above paper. 3

1. **Author’s purpose**

What is the purpose of the author, and to what extent has the purpose been achieved?

Is there anything missing/ not stated?

What does this text add to the body of knowledge in the field?

In the case of the paper above, the **purpose** of the authors is to demonstrate that a National *Rural* Mental Health Strategy is necessary. They argue that due to the unique concerns associated with mental health in rural areas, a separate rural strategy is needed, rather than subsuming rural mental health with National Mental Health Strategy programs. Conducting a literature review and critique of current strategies, the authors develop the argument that current research does not adequately address the needs of rural Australians in relation to mental health. In doing so, Judd and Humphreys make a large contribution to the **body of knowledge** in the field.

As you become more familiar with your field, you may also ask the following question of the text:

- What relationship does this text bear to other works in the field?

2. **Methodology**

What approach was used for the research and how objective is this approach? (Approaches used in methodology could include quantitative or qualitative research, analysis/review of theory or practice, comparative studies, case studies, personal reflection, etc....)

What analytical framework is used to discuss the results?

Are the results of the research valid and reliable?

To support their argument, the authors **analyse and review current practice** and research. The review and critique of current strategies elucidates deficiencies in the approach, and the authors use this to demonstrate that further research needs to be undertaken. The results are discussed within a **comparative framework**; a comparison and critique of old and new research, coupled with evidence which supports the authors’ recommendations. The authors demonstrate that the results of their research have enormous **validity**, and that the body of knowledge they present can clearly inform future practice.

3. **Argument and use of evidence**

What is the central hypothesis?

What is the argument? How clearly and consistently is the argument made?

What claims does the author make in relation to the argument?

What assumptions are made by the author?

What kinds of evidence does the author present? How valid and reliable is this evidence?

What conclusions are drawn? Are these conclusions justified?

The authors **argue** that while National Mental Health Strategy programs have been beneficial for those living in urban areas, a separate National *Rural* Mental Health Strategy is needed in order to adequately address the needs of rural citizens. With a **consistent** and systematic approach, the authors review and critique current research, policies and services, and provide recommendations for reform and future research. Their **central hypothesis** is that there is a higher level of concern in rural and remote communities in terms of mental health, with the underlying **assumption**

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3 Questions sourced from Mort, Hallion and Downey, “*Writing a Critical Review*”. 

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that having a strategy that specifically targets mental health in rural areas will result in a decrease in the social costs associated with mental health disorders.

The structure of the paper serves to present the argument in a systematic manner. In each section, an argument is presented, followed by clear supporting evidence. In the first section of the paper, “The Significance of Mental Health Issues,” the authors assert that the promotion of mental health has positive implications for physical health and productivity. This argument is closely followed by evidence gleaned from expert sources: The Human Rights and Equal Opportunity Commission, the Global Burden of Disease Report, and the Australian National Survey of Mental Health and Wellbeing. The last source is critiqued in terms of its imprecise units of analysis — ‘metropolitan’ and ‘non-metropolitan’— and its limited research scope. The critique of such evidence is used to further support the authors’ main argument.

In the second section, “Mental Health Policy and the Provision of Mental Health Services,” the authors present the changes that have taken place in terms of mental health policy and services over the previous decade, and critique current services in light of ongoing problems. The critique itself contains a number of arguments, which, again, are closely followed by evidence. For example, the argument that rural communities have limited access to services is supported by a discussion on the scarcity of GPs and workforce maldistribution. A further argument, that little research had been directed towards the exploration of differences or the definition of specific issues within the rural setting, serves to introduce the third section.

In this third section, with reference to their own research, which evaluated the National Mental Health Strategy, the authors identify a number of areas for reform and outline short and long-term strategies to achieve such reforms. The benefits of these reforms are outlined, along with clear examples of practical strategies, in order to further support the main argument.

The authors conclude by restating their thesis and offering a final recommendation: that a National Rural Mental Health Strategy would more adequately address the needs of people suffering from mental health problems in rural and remote communities, and that a comprehensive strategy would require “close collaboration between governments, health professionals, mental health agencies and stakeholders, community organisations, carers and clients.”

As you move further into your studies and the arguments you encounter become increasingly sophisticated and complex, you may also need to ask the following question of the text:

- Are there any problems with the argument or the evidence presented?

4. Writing style/language

How does the author use language to persuade the reader of his or her point of view?
Who is the intended audience, and does the writing style suit this audience?
How is the text organised? What effect does this structure have on the reader?

This paper appeared in a peer reviewed, academic journal. The audience, therefore, would consist of the author’s professional peers, health professionals, governments and mental health agencies. The language, style and structure of the paper reflect the knowledge, expertise and authority of the authors and serve to persuade the reader of the author’s point of view. The use of emotive and persuasive language is used particularly clearly in the introduction and conclusion of the paper. The terms ‘distress,’ and ‘cause of concern,’ used in the introduction, serve to orientate the reader towards the authors’ point of view, while the use of terms in the conclusion, such as ‘critical,’ ‘better’ and ‘well overdue,’ serve to cement the argument in the mind of the reader. In the body of the paper, the authors use critical analysis and comparative language (e.g. ‘change’, ‘broader focus’) to keep the reader focussed on the central argument. The argument-evidence-critique approach, used throughout the paper, also serves to promote the central argument and persuade the reader that a strategy for rural mental health is indeed “well overdue.”