

Week 8 Improving your writing

Lesson & Quiz

Authorial Voice

As well as being useful for checking your paraphrasing, quotations, and referencing, Turnitin can be a useful tool to help figure out whether your argument is clear. It can also be used to check whether you have not used enough, or have used too many sources. If you don't use enough sources, then your argument might be weak. If you use too many sources, then your own answer to the question might get lost amidst other people's words. This module provides strategies and tips for how to write clearly and persuasively.

What is authorial voice?

When writing assignments, it is important that you use your own words to state your argument or answer to the assignment question. This is called your authorial voice, and is key to your development as a scholar because it shows the skill with which you are able to evaluate sources and make your own argument.

For example, consider the following two thesis statements. Both of them answer the question "How significant are the long term effects of having had a childhood imaginary companion?"

Why do you think the second thesis statement is clearer?

Thesis statement 1:
Regarding psychological functions, the significance for adults of the impact of childhood imaginary companions is complex.
Thesis statement 2:
I argue that the long term effects of having had a childhood imaginary companion are not significant, because they do not impinge on adults' psychological functions.

The second thesis statement is clearer because it contains a direct answer to the question. It answers the question of "how significant are the long term effects?" by answering "the long term effects ... are not significant". In contrast, the first thesis statement sounds more like a general fact. The idea that the effects are "complex" sounds vague and does not explicitly answer the question. When writing a thesis statement or key message for an assignment, aim to directly answer the question. The second thesis statement is also clearer because the student has used the first person "I". The next section discusses how and when to use the first person.

Should I use the first person?

In many disciplines it is acceptable to use the first person (for example, statements that include "I" or "my"). However, if you are uncertain, you should check with your lecturer whether they want you to use it.

The first person can often help to make your argument clearer. For example, consider the following two extracts from introductions.

Statement 1:

Nuclear proliferation has been an ongoing source of international tension since the end of the Cold War. Although some governments call for either total nuclear disarmament or strict regulations on nuclear armament, many states continue to equip themselves with nuclear weapons. Given the potentially dire consequences of a lack of regulation, international organisations have attempted to coordinate international regulations. However, there is much debate about whether these actions are effective (reference). I argue that while nuclear proliferation is unlikely to be prevented, international organisations do have the capacity to effectively regulate the process of armament. Using examples from India, America, and Russia, I demonstrate how international organisations have employed a range of successful regulations.

Statement 2:

Nuclear proliferation has been an ongoing source of international tension since the end of the Cold War. Although some governments call for either total nuclear disarmament or strict regulations on nuclear armament, many states continue to equip themselves with nuclear weapons. Given the potentially dire consequences of a lack of regulation, international organisations have attempted to coordinate international regulations. However, there is much debate about whether these actions are effective (reference). Nuclear proliferation is unlikely to be prevented, although international organisations do have the capacity to effectively regulate the process of armament. Examples from India, America, and Russia, demonstrate how international organisations have employed a range of successful regulations.

Both of these introductions are fairly clear and make the same argument that international organisations can effectively regulate nuclear proliferation. However, in the first example, it is likely that the reader would be able to identify the student's argument more quickly because they have used "I" in their thesis statement. In the second example, the argument is more implicit. It might take the reader a bit more time to work out which part of the introduction shows the student's argument.

When using the first person, it is important not to overuse it. If every sentence starts with "I think", "I show", or "my essay" for example, the essay would sound like it was based on opinions rather than analysis of the evidence. This overuse of the first person could make the assignment sound informal. Instead, you can use a mixture of the first and third person in your assignments.

Another useful way to avoid overusing the first person is to use it only in particular places. These key places are: the thesis statement in the introduction, methodology

sections, topic sentences, and conclusions. This is because these areas emphasise your argument (the thesis statement in the introduction, topic sentences, and conclusions) or explain something that you did (methodology sections). Using the first person can make your argument and your actions clear to the reader.

Whether or not you use the first person, in most assignments you need to make your answer clear to your reader. This can be achieved using key phrases that show argumentation and critical evaluation. The following sections look at how you can use Turnitin to improve your writing, and give examples of how to use the language of critical evaluation.

How can Turnitin improve my writing?

As well as helping you to check for issues with quoting and paraphrasing, Turnitin can help you to improve your writing by showing you where your own voice needs to be clearer. Your own voice should be placed in a number of key areas in assignments:

- Introductory thesis statements
- Topic sentences
- Conclusions

This means that if you have used a strong authorial voice in these areas, Turnitin should not typically find substantial text matches in your introductory thesis statements, topic sentences, or conclusions.

So, for example, it is usually an indication that a student has a well-placed argument if the Turnitin report looks like this:

INTRODUCTION

Karl Popper's work on the scientific method has contributed to the progression of contemporary scientific philosophy and thought. His alternative to the traditional scientific method poses an answer to the demarcation problem and in this essay I examine both the strongest and most criticised parts of Popper's description – foremost, that it is highly relevant in its adherence to reason, truth and systematic method, while its weakness is that it justifies and categorises science in too simple a way.

Note how the introduction shows the student's own voice - it does not quote or paraphrase.

BODY

Popper's description of the scientific method responds to the demarcation problem - how to differentiate between science and non-science. He came to this from his dismissal of the idea that 'good' scientific theories were the most probable, while the 'poor' theories were the theories that had a lesser probability of occurrence, stating "a theory may be scientific even if there is not a shred of evidence in its favour... That is, the scientific or non-scientific character of a theory can be determined independently of the facts" (Lakatos, 1998, p. 22). In short, Popper stated that a scientific theory could be disproved if a contradictory observation result occurred.

The topic sentences use the student's own words – there are no quotes or paraphrases

The strongest part of Popper's account is that it completely embodies elements of the way society seems to agree that science should actually be practiced. As one critic explains, "It seemed to Popper that these theories ... could in fact explain nothing because they could rule out nothing" (Chalmers, 1999, p. 59). Non-scientific theories are verified by everything – any observation result would fit under the 'umbrella' of the theory, leaving no possible outcome that could falsify it. Hence, his method acknowledges the high esteem and authority to which science is accredited and aims to justify it.

The quotations and paraphrases (with citations) occur in the middle of the paragraphs.

Certainly, the idea of falsification has been contested on many accounts. Kuhn responded to Popper's view of astrology by suggesting that Popper's account of science versus non-science is not historically accurate for the practices of astrology: "Astrology cannot be barred from the sciences because of the form in which its predictions were cast" (Kuhn, 2011, p. 274). This concept is furthered by Chalmers, who argues that the ways in which something is proved can hardly be of more or less value than the ways in which something is disproved (Chalmers, 1999, p. 102). Popper's account is therefore contradictory.

The summary sentences contain the student's own voice.

CONCLUSION

In conclusion, Popper's description of the scientific method is revolutionary and powerful. While it may be on some accounts theoretically sound with flaws in its simplistic practical application, it is strongest in its abolishment of bias and prejudice from the scientific method.

The conclusion consists of the student's own voice.

In the above example, note that there are no text matches, no quotes, and no paraphrases in the introduction, conclusion, or topic sentences. The text matches occur in the middle of the paragraphs, since the student is using this evidence to support their own argument.

Note too that Turnitin does not identify all the quotes that the student uses - for instance, there is a quote in the third body paragraph that is not highlighted at all. Turnitin does not always identify text matches when you might expect it to, and

sometimes it only highlights parts of quotations. This is because the software searches through so many sources in such a short time that it often only identifies the most prevalent matches. Since Turnitin does not necessarily identify all the sources you use, it is up to you to double check that all your quotes, paraphrasing, and referencing are appropriate. You can find out more about how to check your quotations and paraphrasing in this site.

The following sections explain more about how to use Turnitin to check your voice in introductions, paragraphs, and conclusions.

Turnitin and introductions

When writing introductions, it is important that your own answer to the question and your reasons for your answer are clear. Usually an introduction contains the following elements:

- A brief explanation of the background
- An outline of why the issue is controversial or debated in the discipline
- Your thesis statement (i.e. your answer to the assignment question)
- An outline of the assignment structure that explains where the key reasons for your argument are addressed

Each of these four components usually take up 1-2 sentences.

An introduction should mostly consist of your own words

Since the diagram above shows that approximately half of the introduction should be committed to explaining your answer, there shouldn't be a lot of quotes or paraphrasing in it. While you may wish to use evidence to provide context about the issue you are examining, it is preferable to use paraphrasing, and if you want to use quotations, do so sparingly and keep them very brief. If you do this, then it makes it easier for your reader to understand your ideas. Your reader wants to be able to find your key points and your answer to the question easily, so avoid making them wade through a lot of other people's words.

An unclear introduction

The image below shows an introduction that uses excessive quotes. This information could be presented more concisely if it was paraphrased instead. Even more problematic is that the introduction does not answer the essay question directly. Although it tells us that the "essay explores whether apples are better than oranges", and that it's going to look at various topics (chemical compounds, versatility and availability), it does not actually tell us what the writer's answer is. As a reader, you may be left wondering "well, are apples better or not?", or, "why have I just read this introduction if it has no main point?" It would be much better for the writer to tell us their answer - whether they argue that apples are better, whether oranges are better, or whether the two are equally beneficial.

Essay Question: Apples are better than oranges. Discuss

Introduction

The importance of fruit as part of a healthy diet is well accepted and encouraged by health professionals. Cancer Council Australia shows that "eating a healthy, balanced diet reduces your risk of developing cancer, while a poor diet increases your cancer risk" (Cancer Council of Australia, 2014). Also, "people who consumed a diet high in fruit, vegetables and wholegrains had a lower risk of developing chronic diseases such as heart disease" (National Heart Foundation of Australia, 2014). Whilst there is no debate about the need to encourage fruit consumption, there is still much to be learned about the chemical nutrients of different fruit, and whether some fruits are more beneficial than others. This essay explores whether apples are better than oranges. It looks at the topics of chemical compounds in fruit, as well as the versatility and availability of apples and oranges. As the Department of Health (2014) states, "A healthy eating pattern is fundamental to the maintenance of good health and well-being."

A better introduction

Here's an example of an improved introduction, where you can easily identify the argument (that apples are better). The writer has just used one quotation and has paraphrased the rest of the information. By condensing the information, the writer leaves more space to elaborate on their argument and the reasons for their argument. Note too that even though the essay is written in the third person, the phrase "this essay argues" is used to help the reader to identify the argument quickly and

clearly.

Essay Question: Apples are better than oranges. Discuss

Introduction

The importance of fruit as part of a healthy diet is well accepted and encouraged by health professionals. Current dietary guidelines promote the daily consumption of fruit to assist in the prevention of cancer (Cancer Council of Australia, 2014), and show that "people who consumed a diet high in fruit, vegetables and wholegrains had a lower risk of developing chronic diseases such as heart disease" (National Heart Foundation of Australia, 2014).

Whilst there is no debate about the need to encourage fruit consumption, there is still much to be learned about the chemical nutrients of different fruit, and whether some fruits are more beneficial than others. Understanding the differences between fruit in terms of cultivation, storage and use is important because it influences fruit consumption and dietary advice. This essay argues that when these factors are taken into consideration, whilst both fruits offer nutritional advantages, apples are superior to oranges. In particular, the health benefits of the chemical compounds in apples along with their advantages in terms of versatility and availability, give them distinct advantages over oranges as a fruit of choice.

An even better introduction

Finally, here's an even better introduction, where the writer has used paraphrasing rather than quotations. This means that the introduction is more concise, and the reader can easily find the writer's answer to the question.

Note also that the placement of the citations show which information comes from which sources. For example, the idea that eating fruit helps to prevent cancer belongs to the first citation from the Cancer Council of Australia, the next idea that eating fruit can help prevent cardio vascular disease belongs to the National Heart Foundation of Australia, and so on. Where you put citations shows the reader which ideas belong to which authors, so when paraphrasing and quoting, place the citations to distinguish different people's ideas from each other's.

Essay Question: Apples are better than oranges. Discuss

Introduction

The importance of fruit as part of a healthy diet is well accepted and encouraged by health professionals. Current dietary guidelines promote the daily consumption of fruit to assist in the prevention of cancer (Cancer Council of Australia, 2014), cardiovascular disease (National Heart Foundation of Australia, 2014) and other chronic and degenerative diseases (Department of Health, 2014). Whilst there is no debate about the need to encourage fruit consumption, there is still much to be learned about the chemical nutrients of different fruit, and whether some fruits are more beneficial than others. Understanding the differences between fruit in terms of cultivation, storage and use is important because it influences fruit consumption and dietary advice. This essay argues that when these factors are taken into consideration, whilst both fruits offer nutritional advantages, apples are superior to oranges. In particular, the health benefits of the chemical compounds in apples along with their advantages in terms of versatility and availability, give them distinct advantages over oranges as a fruit of choice.

The next section on paragraphing shows you how you can use Turnitin to check whether your topic sentences show your own ideas, and how to identify whether you have used evidence sufficiently in the body of paragraphs.

Turnitin and paragraphs

Paragraphs should consist of three main parts:

1. The topic sentence (which explains how the paragraph's main idea answers the assignment question);
2. Supporting evidence and analysis; and
3. A concluding sentence that explains the link between one paragraph and the next.

Your own voice should be clear in the topic sentence and the concluding sentence, since in these places you are explaining how you are answering the assignment question. This means that in Turnitin, **text matches should not usually appear in the first or last sentences** of your paragraphs (unless the matches are to miscellaneous words). The middle of the paragraph is typically where text matches appear.

A bad paragraph

For example, consider the below example of a paragraph. It is responding to the question "Should Australia be considered a republic?" However, the student's argument is unclear, because they used other people's words in the first sentence.

Using a quote in the topic sentence is a problem because it does not tell the reader what the student's own idea is. Instead, the student should rewrite the topic sentence using their own words.

Another problem with this paragraph is that it uses a lot of quotes, which can mean that the student's own voice gets lost amongst the other people's voices. A consequence of this is that the student does not explain how the evidence supports their argument. Are they using this evidence to argue that Australia should be considered a republic or not? Even if you can tell that the student is implying that Australia should not be considered a republic, this type of paragraph forces you to read between the lines, and to guess at their argument.

Winterton defines a republic as 'a state based upon popular sovereignty, in which all public power is chosen by the people or by persons and institutions chosen by them, directly or indirectly'.⁷ However, the Australian Constitution states that 'provisions referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom and that a Governor-General appointed by the Queen should be her majesty's representative'.⁸ Furthermore, it can be said that the Queen 'acts as ultimate constitutional guardian through exercising, or more accurately, holding in reserve, the few powers which confer an independent discretion to act without or contrary to ministerial advice'.⁹ Though the reserve powers are not actually codified, they involve the power to appoint a Prime Minister if an election has resulted in a hung parliament the power to dismiss a Prime Minister where he or she has lost the confidence of the Parliament, the power to dismiss a Prime Minister or Minister when he or she is acting unlawfully and the power to refuse to dissolve the House of Representatives despite a request from the Prime Minister'.¹⁰ Indeed, the report of the Republic Advisory Committee notes that 'the hereditary office of the monarch as Head of State is the only element of the Australian system of government which is not consistent with a republican form of government'.¹¹

A slightly improved paragraph

This paragraph is a revised version of the example above, and it's a better paragraph. Note how the topic sentence now contains the student's own voice (the text match in the topic sentence is only to miscellaneous terms), and the answer to the question is clear. In answer to the assignment question, the student is arguing that Australia cannot be considered a republic. This idea is made clear in the topic sentence, and it's also clear from the topic sentence that the paragraph will focus on the constitutional monarchy system.

In the middle of the paragraph, the evidence is analysed. If you read through the example, you can see that the student uses the language of critical analysis to show how the evidence helps them to answer the question. First of all, the student uses phrases like "according to Winterton's definition" and "the Australian Constitution" to show where the evidence is from. Secondly, the student uses phrases such as "counter to" and "nevertheless" to show how the ideas in different sentences connect to each other. For instance, the phrases "counter to" and "some might claim" shows that they are presenting a counterargument - a side of the debate which the student does not agree with. In the next sentence, the student

uses "nevertheless" to indicate that the following evidence rebuts the counterargument.

Finally, the student wraps up the paragraph with a sentence that reiterates their argument that Australia cannot be considered a republic.

Overall the student has paraphrased more than in the first example, which is good. The main weakness of this paragraph, however, is that it still relies substantially on quotations, which makes it a relatively long paragraph. The quotation in the final sentence is particularly problematic, since it ends the paragraph with someone else's words, not the student's own words. As with topic sentences, the final sentences of paragraphs should contain your own voice. Furthermore, the long (indented) quote gives a lot of information which could perhaps be shortened or paraphrased.

Despite Australia's arguably republican operations, the fact that it ⁷is a constitutional monarchy means that it ²cannot definitively ³be termed a republic. According to Winterton's definition, in order to be a republic, the Australian people would have to elect the public power.¹² Although Australia uses an elected parliamentary system, the Australian Constitution states that 'provisions ... referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom'¹³ and that '[a] Governor-General appointed by the Queen shall be Her Majesty's representative'.¹⁴ This constitutional inscription of the monarch and their Governor-General means that at its core, Australia is not a republic. Counter to the monarch and Governor-General's inclusion in the constitution, some might claim that Australia can still be considered a republic, since over the past 30 years, the Queen and the Governor-General have not significantly exerted their power within Australia.¹⁵ Nevertheless, the constitution does provide the monarch reserve powers which can be used to override the elected government's powers.¹⁶ Although the reserve powers are not actually codified, they involve:

²The power to appoint a Prime Minister if an election has resulted in a hung parliament; [t]he power to dismiss a Prime Minister where [they have] lost the confidence of the Parliament, the power to dismiss a Prime Minister or Minister when [they are] acting unlawfully; and [t]he power to refuse to dissolve the House of Representatives despite a request from the Prime Minister.¹⁷

²⁰As this evidence shows, and as the Republic Advisory Committee have noted, 'the hereditary office of the monarch as Head of State' ³is the only element of the Australian system of government which is not consistent with a republican form of government'.¹⁸

A good paragraph

Now consider this paragraph, which is an even better version of the example above. Note how both the topic sentence (still with the technical terms as text matches) and the concluding sentence now contain the student's own voice, and both of these sentences clearly answer the assignment question by arguing that Australia cannot be described as a republic. The evidence is analysed in the middle of the paragraph, and like the example above, the student uses the language of

critical analysis to show the connections between ideas and evidence. The long quote has been reduced, which makes this paragraph shorter and easier to read.

Despite Australia's arguably republican operations, the fact that it **is a constitutional monarchy** means that it **cannot** definitively **be** termed **a republic**. According to Winterton's definition, in order to be a republic, the Australian people would have to elect the public power.¹⁹ Although Australia uses an elected parliamentary system, **the Australian Constitution** states that **provisions ... referring to the Queen shall extend to Her Majesty's heirs and successors in the sovereignty of the United Kingdom**,²⁰ and that **'[a] Governor-General appointed by the Queen shall be Her Majesty's representative'**.²¹ This constitutional inscription of the monarch and their Governor-General means that at its core, Australia is not a republic. Counter to this, some may claim that Australia can still be considered a republic, since over the past 30 years, the Queen and the Governor-General have not significantly exerted power within Australia.²² Nevertheless, the constitution does provide the monarch reserve powers which can be used to override the elected government's powers.²³ Although the reserve powers are not actually codified, they involve **'[t]he power to appoint a Prime Minister if an election has resulted in a "hung parliament" [and t]he power to dismiss a Prime Minister where [they have] lost the confidence of the Parliament'**.²⁴ As this evidence shows, and as the Republic Advisory Committee have similarly noted,²⁵ since the monarchy holds power as Head of State, Australia cannot be described as a republic.

In sum, **typically there should be no text matches in the first or last sentences of your paragraphs**. The middle of the paragraph is where you find text matches and your analysis of the work. Use linking and critical language here to explain how the ideas connect. And in the first and last sentences of the paragraph, explain how the paragraph answers your assignment question.

Turnitin and conclusions

Conclusions, like introductions, should consist of mostly your own words. They have two main parts:

1. Summarise your argument and the key reasons for your argument
2. Discuss the implications or importance of your argument. This can also be thought of as the "So what?" move, where you ask yourself "What does all of this mean for my topic or field?"

Conclusions also should not add any new information. This is because the body of the assignment is where you analyse all the relevant material to support your answer. Since conclusions should contain your own words and not add any new information, **text matches are not often seen in a conclusion**.

Problems with quotations in a conclusion

Below is an example of a conclusion that uses too much evidence, with two quotations (the pink and red text matches). The essay question is "How would you assess the part played by the international community in bringing about the end to the conflict in former Yugoslavia?"

Reading through the conclusion, you can find the author's general argument stated in the first sentence, and in the third sentence the author gives a more specific argument with the reasons for their argument (the brown text match is to miscellaneous terms so it is not an issue). However, since so much space in the conclusion is taken up with the two quotations (the pink and the red text matches), the author's own voice gets overshadowed.

Furthermore, the author doesn't explain the connection between the quotes and their own argument. The first text match is simply inserted in as a stand alone sentence, and the author does not take the time to analyse or refer to it. This means that the quote appears disconnected from the author's own argument, and the reader is forced to interpret it themselves.

Although the second quote is introduced with the phrase "As Sharp claims", the author does not take the time to explain how the quote fits into their argument. In fact, the quote only focuses on the US, France and Britain, whereas the essay question was about the international community, which includes organisations like the United Nations, as well as other countries. Since the author doesn't analyse the quote, the reader could be left to wonder whether the author neglected to address other members of the international community in their response.

Also, the word "claims" suggests that the author does not necessarily agree with Sharp. In fact, the word "claims" indicates that the author thinks that Sharp's ideas are not supported by the evidence. Because the author does not analyse the quote, the reader could be confused about why the author used this quote.

The international community missed so many opportunities to bring about an end to conflict in former Yugoslavia. "A great deal of bloodshed in Bosnia could have been avoided had the security Council acted on the basis of established norms and practices of international law."⁶ This essay has demonstrated that the lack of political will by the international community to use military force prolonged the war, and as such, the role of the international community could only be described as grossly inadequate and largely ineffective in bringing about an early end to the hostilities and bloodshed. As Sharp claims,

[o]nly after almost four years of war, more than 200,000 dead, and 2 million displaced did the United States exert leadership and, together with France and Britain, take the kind of military action that could have prevented war in the first place.⁷

Talk about the evidence

Occasionally, you might be tempted to re-iterate one quote or a piece of evidence in the conclusion. Before doing this, consider whether you should instead integrate the quote or evidence into one of your existing paragraphs, or write a new paragraph about it. **Only** use a quote or piece of evidence in a conclusion if it is concise, relevant, and if you have explained in your own words how the quote or evidence supports your argument.

In this conclusion, the author uses a long quote at the beginning of the conclusion to emphasise their main point. Note how the author directly refers to the quote, saying "Sharp's quote above", and they explain why they use the quote. This works well because it helps the reader to understand why the quote is necessary for the author's argument.

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Only after almost four years of war, more than 200,000 dead, and
2 million displaced did the United States exert leadership and,
together with France and Britain, take the kind of military action
that could have prevented war in the first place.⁹

Sharp's quote above illustrates the dire human consequences of the international community's ineptitude in bringing about the end of the war in former Yugoslavia. This essay has argued that before signing the Dayton Peace Accords, the international community's strategies and policies were grossly inadequate and ineffective in ending the conflict in former Yugoslavia. Clearly, The UN blindly went into a 'peacekeeping' situation, which it was incapable of handling. Compounding this inadequacy, the numerous EC-brokered cease-fires were almost immediately broken. Underlying these issues were the US's failure to exert strong leadership from the beginning and the absence of any collective action by the international community, which extended the war. Although peace was finally achieved through the 1995 Dayton Peace Agreement, the fact that it took the international community four years to achieve this makes this success less impressive. The international community thereby failed to fulfil their roles and obligations, prolonging one of the most significant and devastating wars in the late twentieth century.

A good conclusion

Here is another good conclusion, where the author has not used any quotations. Note how the author's argument is placed in the first sentence, and they go on to

outline the reasons for their argument. Since they don't use any quotes, they have the space to explain their own argument clearly.

This essay has shown that before signing the Dayton Peace Accords, the international community's strategies and policies were grossly inadequate and ineffective in ending the conflict in former Yugoslavia. Clearly, The UN blindly went into a 'peacekeeping' situation, which it was incapable of handling. Compounding this inadequacy, the numerous EC-brokered cease-fires were almost immediately broken. Underlying these issues were the US's failure to exert strong leadership from the beginning and the absence of any collective action by the international community, which extended the war. Although peace was finally achieved through the 1995 Dayton Peace Agreement, the fact that it took the international community four years to achieve this makes this success less impressive. The international community thereby failed to fulfil their roles and obligations, prolonging one of the most significant and devastating wars in the late twentieth century.