

# Guidelines for Annotating Argumentation Flaws in Persuasive Essays

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# Chapter 1

## Introduction

In this study we will annotate argumentation flaws in student essays. In particular, we will apply the argument evaluation framework proposed by Johnson and Blair (1994) which includes the following three criteria:

- *Relevance*: An argument fulfills the relevance criterion, if all of its premises count in favor of the truth (or falsity) of the claim.
- *Acceptability*: An argument fulfills the acceptability criterion if its premises represent undisputed common knowledge or facts.
- *Sufficiency*: An argument complies with the sufficiency criterion if its premises provide enough evidence for accepting or rejecting the claim.

According to Govier (2010, p. 87) an argument is *cogent* if it fulfills all of those criteria. An argument is fallacious if it violates one or more of these criteria.

In the following sections, we will first provide a brief introduction to argumentation (section 1.1) followed by a guideline to identify the standard form of arguments (section 1.2) and the annotation process (section 1.3). Chapters 2-4 introduce the three criteria in detail and provide real examples of flawed arguments.

### 1.1 Argumentation in a nutshell

Argumentative practices are omnipresent in our daily verbal communication and thinking. We engage argumentation in order to infer certainty, to obtain widely accepted conclusions or to persuade a particular audience. In general, argumentation is a verbal activity of reason which aims at increasing or decreasing the acceptability of a controversial standpoint (van Eemeren et al., 1996, p. 5). Each *argument* involved in this process consists of several components. It includes a claim and one or more premises. The *claim* is a controversial statement and the central component of an argument. The *premises* constitute the reasons for believing the claim to be true or false (Damer, 2009, p. 14). An example of a basic argument including one claim and one premise is:

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Premise: “*Scientists demonstrated that cloning could be used to raise organs.*”

Claim: “*Humankind will benefit from modern cloning technology.*”

The claim in this argument states what the author wants to convince the reader of whereas the premise is a reason given for supporting the claim. A general pattern for such a simple argument is “*<Claim> because <Premise>*”. The next example illustrates a more complex argument including several premises and a particular structure:

Premise 1: “*Cloned organs match to the blood group and tissue of patients.*”

— SubPremise 1.1: “*Cloned stem cells of the patient can be used to raise organs.*”

Premise 2: “*Using cloned organs instead of donor organs shortens the healing process.*”

— SubPremise 2.1: “*Finding an appropriate donor is time consuming.*”

Claim: “*Cloning benefits the medical area of organ transplantation.*”

In contrast to the first example, the second example also includes sub premises intended to support the premises given for the claim. The general structure of each argument can be considered as a tree in which the claim (the central component of an argument) is the root node.

Both examples are given in its *standard form* in which all premises are present and the claims are clearly stated. However, an argument can be represented in text in many different ways and in real instances of arguments, some of the components may be missing, highly paraphrased, spread over several sentence or implicit. For instance, the previous argument can be represented in the following way:

*“Cloning will be beneficial for people who are in need of organ transplants. Cloned organs will match perfectly to the blood group and tissue of patients since they can be raised from cloned stem cells of the patient. In addition, it shortens the healing process. Usually, it is very rare to find an appropriate organ donor and by using cloning in order to raise required organs the waiting time can be shortened tremendously.”*

In this representation of the argument, the claim is clearly stated in the first sentence and it is clearly visible which premises are given for supporting the claim. Another lexical representation could be as follows:

*“Many patients suffer from weak organs like livers, hearts or kidneys. Using stem cells would improve the quality and duration of the healing process tremendously. Finding an appropriate donor can take several years in particular cases.”*

In this lexical representation the actual claim that cloning is beneficial for the medical field of organ transplantation is not present. Indeed the term cloning is not present at all. So the representation requires to know that stem cells could be cloned from the patient, that stem cells can be used to raise organs, etc. In comparison with the first lexical representation it is also hardly possible to recognize how the statements support each other and what the reasoning structure of the argument is. However, in order to evaluate the quality of an argument it is necessary to be aware of its standard form and to know what the author wants to convince us of. Therefore, we will first investigate several examples in order to recognize the claim and the standard form of an argument.

## 1.2 Identifying the Standard Form of Arguments

The standard form includes the premises (reasons) given for a claim in an ordered structure. Usually, the standard form lists all premises (and sub premises) before the claim (conclusions) analogue to the examples provided above. One way to identify the standard form of an argument is to first recognize what the author wants to convince the reader of (claim) before identifying the reasons given for supporting the claim. Fortunately, student essays exhibit a common structure which facilitates the identification of the standard form of the individual arguments.

A persuasive essay is usually written according to a *prompt* which outlines the *topic* and asks the author to develop a stance on the topic. The stance on the topic of the author is encoded in the major claim (thesis statement) in the introduction and restated in the conclusion. The actual arguments including claims and premises are present in the body paragraphs of the essay and either support or attack (contra arguments) the major claim. Being aware of the topic and the stance of the author on the topic facilitates the identification of the claim and the standard form respectively. So the first step in the annotation process is to read the prompt and the major claim(s) before identifying the claim and the premises of the actual argument. The following examples illustrate the identification of the standard form.

### Example 1.2.1 (essay007\_2):

**Prompt:** “*With the rise in popularity of the internet, newspapers will soon become a thing of the past. To what extent do you agree or disagree?*”

**MajorClaim(s):** “*newspapers have lost their competitive advantage to sustain their prolonged existence*”

**Paragraph:** “*Another point is that, from the economic aspect, buying newspapers appears to be a waste of money when the internet becomes available for every one. It is clear to recognize that the internet service is being provided at a low cost or even free in many countries. The question arises as to whether or not a person spends an extra money buying newspapers to receive the same, even usually less information than those he can have with the internet? The answer, perhaps, is that hardly would rational people do so. For this reason, the number of people reading newspapers may continue falling sharply, possibly leading to the close-downs of many in the coming time.*”

The prompt includes the topic of the essay which is in example 1.2.1: “*Will newspapers disappear because of the availability of the Internet?*”. The major claim reveals the supporting stance of the author. In particular, the authors’ stance/major claim is “*newspapers will disappear*”. For supporting this stance, the author claims that “*the number of people reading newspapers may continue falling sharply*”. As reasons/premises for supporting this claim she/he states that “*Spending money for newspapers is a waste of money*” because “*The Internet provides the same information as newspapers*” and since “*Internet is cheaper and even provided for free in many countries*”. Note that this argument also implicitly assumes that “*newspaper providers cannot run their business if no one buys newspapers*”. So the standard form for the argument is as follows:

### Example 1.2.1 (standard form):

Premise1: “*Spending money for newspapers is a waste of money*”

Premise2: “*The internet provides the same information as newspapers*”

Premise3: “*Internet is cheaper and even provided for free in many countries.*”

Premise4: “*Newspaper providers cannot run their business if they do not sell newspapers*” (implicit)

Premise5: “*No one will spend money buying newspapers*”

Claim: “*The number of people reading newspapers may continue falling sharply possibly leading to a close-down of many newspaper providers.*”

Note that persuasive essay guidelines recommend to include the claim either in the first or last sentence of a paragraph. In addition, the claim is usually a direct reason given for the major claim. So a good strategy to identify the claim is to check if the first or last sentence includes a direct reason for the major claim and if the remaining sentences provide reasons/premises for it.

The topic of the next example is “*cooperation or competition in primary education*”. The major claims of the essay indicate the stance of the author which supports cooperation during primary education.

**Example 1.2.2 (essay001\_1):**

**Prompt:** “*Some people think that children should be taught to compete, but others think that children should be taught to cooperate. What do you think?*”

**MajorClaim(s):**

(1) “*we should attach more importance to cooperation during primary education*”

(2) “*a more cooperative attitudes towards life is more profitable in one’s success*”

**Paragraph:** “*First of all, through cooperation, children can learn about interpersonal skills which are significant in the future life of all students. What we acquired from team work is not only how to achieve the same goal with others but more importantly, how to get along with others. During the process of cooperation, children can learn about how to listen to opinions of others, how to communicate with others, how to think comprehensively, and even how to compromise with other team members when conflicts occurred. All of these skills help them to get on well with other people and will benefit them for the whole life.*”

In order to identify the claim of the argument, we check the first and last sentence since those are likely to include the claim. In this example, the first sentence includes the claim of the argument. In order to verify if we have found the correct claim, we can formulate the major claim as a question and check if our claim candidate answers the question. In our example, the question is “*Why should we attach more importance to cooperation during primary education?*” and the answer is “*Cooperation is important for the future life of children*”. For identifying the reasons/premises of the claim we can again formulate the claim as a question like “*Why is cooperation important for the future life of children*” and the answer is that “*through cooperation children can learn interpersonal skills*”. Consequently the standard form of the argument is as follows:

**Example 1.2.2 (standard form):**

Premise1: “*Cooperation fosters interpersonal skills (Children learn how to achieve the same goal with others, how to get along with others, listen to opinions, communicate with others, think comprehensively, compromise with other team members, etc.)*”

Premise2: “*Interpersonal skills will benefit them in their future life*”

Claim: “*Cooperation is important for children’s future life*”

The topic of example 1.2.3 is again “*Will newspapers disappear because of the availability of the Internet?*” and the authors’ stance is that “*newspapers will disappear*.”

**Example 1.2.3 (essay007\_3):**

**Prompt:** “*With the rise in popularity of the internet, newspapers will soon become a thing of the past. To what extent do you agree or disagree?*”

**MajorClaim(s):** “*newspapers have lost their competitive advantage to sustain their prolonged existence*”

**Paragraph:** “*Last, but not least, when taking environment into consideration, people must conceive that the more newspapers are published, the more trees are cut down. This is simply the contributor to the deforestation which is happening all over the world today. At this point, newspapers’ production will have to face environmentalists on its way to be alive.*”

In this example neither the first sentence nor the last sentence include a clear claim. However, the whole paragraph covers a particular *aspect* namely “*environmental damage*”. So the actual claim which is not explicitly mentioned in the paragraph is that “*newspaper production harms the environment*”. The reasons/premises given by the author are that “*trees need to be cut down for producing newspapers*” which is indeed a particular kind of environmental damage. The argument also implicitly assumes that producing paper requires wood and consequently felling trees. The standard form of this argument is:

**Example 1.2.3 (standard form):**

Premise1: “*The more newspapers are published the more trees are cut down*”

Premise2: “*Deforestation (felling trees) harms the environment*”

Premise3: “*Producing paper requires wood*” (implicit)

Claim: “*Newspaper production harms the environment*”

This argument indicates that recognizing the claim might require to interpret the paragraph and to identify the general aspect of the argument. In order to test the identified aspect and claim respectively, we can again formulate the major claim as a question and check if the claim answers the question. In this example the question is “*Why will newspapers disappear?*” and the answer “*newspaper production harms the environment*” (claim).

Example 1.2.4 illustrates a more complicated example. The topic of the essay is: “*Is higher education or primary education more important for the development of a country?*”. The authors’ stance is that both play an important role for the development of a country (see major claim).

**Example 1.2.4 (essay008\_1):**

**Prompt:** “*For successful development of a country, should a government focus its budget more on very young children education rather than universities?*”

**MajorClaim(s):**

- (1) *“a government is supposed to offer sufficient financial support for both*
- (2) *“a government should spare effort on young children education as well as universities”*

**Paragraph:** *“Concerning that elementary education, like the base of a architecture, is the fundamental requirement to be a qualified citizen in today’s society, government should guarantee that all people have equal and convenient access to it. So a lack of well-established primary education goes hand in hand with a high rate of illiteracy, and this interplay seriously compromises a country’s future development. In other words, if countries, especially the developing countries, are determined to take off, one of the key points governments should set on agenda is to educate more qualified future citizens through elementary education.”*

In the present argument the author argues about primary education only. The terms *“take-off”* and *“future development of a country”* suggest that the aspect of the argument is economic development. So we can infer the claim that *“primary education is essential for economy”*. As a reason the author states that a lack in primary education of citizens correlates with a high rate of illiteracy which in turn seriously harms the future development (economy) of a country. Following this interpretation the standard form of this argument is as follows:

**Example 1.2.4 (standard form):**

Premise1: *“A lack of primary education correlates with high rate of illiteracy.”*

Premise2: *“A high rate of illiteracy seriously compromises a country’s future development.”*

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Claim: *“Primary education is essential for the economical development of a country.”*

The topic of example 1.2.5 is *“studying abroad”*. In particular, the prompt asks the student to present specific reasons why students study abroad. The author supports studying abroad and states in the major claim(s) that *“studying abroad has many advantages”*.

**Example 1.2.5 (essay006\_2):**

**Prompt:** *“Many students choose to attend schools or universities outside their home countries. Why do some students study abroad? Use specific reasons and details to explain your answer.”*

**MajorClaim(s):**

- (1) *“studying abroad has many advantages*
- (2) *“studying abroad does not only have advantages, but also can change us in a very positive way”*

**Paragraph:** *“One other important factor is the new academic experience that the students can obtain at the institution where they are pursuing their studies. For example, they will get exposed to a different educational system. They will meet new professors and new classmates which makes the academic experience different from that in their home country.”*

The claim of the argument is present in the first sentence of the paragraph. The author states that *“students gain novel academic experiences by studying abroad”*. The author justifies the claim with two reasons. First, she/he states that *“students will be exposed to a different educational system”* which can be considered as a



novel academic experience. The second reason is present in the last sentence of the paragraph and states that “*students will meet new professors and classmates*”. Finally, the author states that these academic experiences are different from those in their home country. So the standard form of the argument is as follows:

**Example 1.2.5 (standard form):**

Premise1: “*Students will be exposed to a different educational system*”

Premise2: “*Students will meet new professors and classmates.*”

Premise3: “*These academic experiences are different from those in their home country*”

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Claim: “*Students gain novel academic experiences by studying abroad*”

Previous examples illustrated the identification of the standard form of an argument. The procedure includes the following steps: (1) identification of the topic (prompt), (2) identification of the authors’ stance (major claim), (3) Identification of the claim (frequently in the first or last sentence of the paragraph) and (4) Identification of the reasons. Remember that formulating the major claim or the claim as a question can facilitate the identification of the claim and/or premises.

Note that the identification of the standard form is an important prerequisite for assessing an argument since the standard form includes the argument in a structured form and clearly represents the connection between the given reasons and the claim. Therefore, we will first identify the standard form before assessing the argument. If necessary, please write down the standard form before assigning the evaluation criteria. So far, we have investigated arguments which fulfill all three criteria. The next chapters will introduce the particular criteria in detail.

## 1.3 Annotation Process

The process for analyzing the arguments in persuasive essays includes the following steps:

1. Identify the topic of the essay by carefully reading the prompt of the essay.
2. Identify the authors’ stance on the topic by reading the major claim
3. Identify the claim in the paragraph (frequently in the first or last sentence)
4. Recognize the standard form by identifying the premises (chapter 1.2)
5. Assess the relevance (chapter 2)
6. Assess the acceptability (chapter 3)
7. Assess the sufficiency (chapter 4)

# Chapter 2

## Relevance

In a good argument the premises need to count in favor of the truth (or falsity) of the claim. In other words, the given premises need to be relevant for the claim. The following example illustrates a relevance issue:

Premise: “*Students earn a lot of experience during their stay in another university.*”

Claim: “*Students who studied abroad will contribute more in their future jobs*”

The claim asserts that students who studied abroad contribute more than other students who didn’t study in a foreign country. As reason for supporting this claim, the author states that students who studied in another university gained a lot of experience. However, more experience is not a guarantor for more commitment. So the premise does not counter in favor of the claim and consequently the claim does not follow from the premise. Therefore, the premise is not relevant to the truth of the claim. This particular type of relevance flaw is also called *non-sequitur* which translates to it-does-not-follow.

A premise also violates the relevance criterion (1) if it assumes the truth of the claim or (2) if it just paraphrases/reformulates the claim. This case is illustrated in the following example:

Premise: “*Having children brings happiness to our life.*”

Claim: “*Parents are so serendipitous with their kids.*”

The claim states that having children brings happiness to our life. The premise just reformulates the claim which cannot be considered as a reason for the claim. A better premise would be for example that raising children is like having an important goal in your life and that someone is more happy if she has a goal. This type of fallacy is called *begging the question* which is generally defined as an argument in which the premises presuppose the truth of the claim. It is also called *arguing in a circle*.

Having illustrated the basic notion of relevance issues, we will investigate real examples from student essays.

**Example 2.1 (essay005\_2):**

**Prompt:** “*The idea of going overseas for university study is an exciting prospect for many people. But while it may offer some advantages, it is probably better to stay home because of the difficulties a student inevitably encounters living and studying in a different culture. To what extent do you agree or disagree this statement? Give reasons for your answer.*”

**MajorClaim(s):**

- (1) “*one who studies overseas will gain many skills throughout this experience*”
- (2) “*living and studying overseas gives the individual a new perspective on the subject that is studied or in general life*”

**Paragraph:** “*Second, living and studying overseas is an irreplaceable experience when it comes to learn standing on your own feet. One who is living overseas will of course struggle with loneliness, living away from family and friends but those difficulties will turn into valuable experiences in the following steps of life. Moreover, the one will learn living without depending on anyone else.*”

The topic of example 2.1 is “*studying abroad*” and the authors’ stance is “*for*” (major claim: students studying abroad gain many skills/experience). The claim of the argument is present in the first sentence and the aspect of the argument is “*standing on your own feet*”. By reformulating the major claim as a question we can verify that the claim of the argument is “*By studying overseas students learn to stand on their own feet.*”. The second sentence includes a *rebuttal* to make the argument stronger against any potential criticism. Note that we will not consider rebuttals in our assessment since, those are usually only meant to prevent criticisms and not to support the actual claim. The last sentence includes a reason for the claim (this is also indicated by the term “*moreover*” which indicates an additional reason/premise). So the actual argument of the author is “[*By studying overseas students learn to stand on their own feet*]<sub>claim</sub> because [*the one will learn living without depending on anyone else*]<sub>premise</sub>”. Since “*standing on your own feet*” is just a reformulation of “*living without depending on anyone else*”, the reason given is not relevant to the truth of the claim. So we will annotate the argument with a relevance flaw.

Example 2.2 is taken from an essay about “*influence of computer on children*” (topic). The author agrees that computers have a bad influence on children.

**Example 2.2 (essay024\_1):**

**Prompt:** “*Using computer every day can have more negative than positive effects on your children? do you agree or disagree?*”

**MajorClaim(s):** “*It still has its bad side, especially for children*”

**Paragraph:** “*First, using computer constantly has bad influence on children’s eyes. When they concentrate on computer for too long, their eyes will get tired, which is the main reason for some eyes problems, typically shortsighted.*”

The claim of the argument is present in the first sentence. It states that that “*Using computers has bad influence on children’s eyes*”. The next sentence elaborates that claim and does not provide any reason why the usage of computers harms the eyes of children. So it does not answer the question and thus cannot be relevant to the truth of the claim.

Example 2.3 illustrates that the identification of the standard form and the correct claim respectively is crucial for evaluating arguments. The topic of the essay is “*Will newspapers disappear because of the availability of the Internet?*” and the authors’ stance is that “*newspapers will disappear*”.

**Example 2.3 (essay007\_1):**

**Prompt:** “*With the rise in popularity of the internet, newspapers will soon become a thing of the past. To what extent do you agree or disagree?*”

**MajorClaim(s):** “*newspapers have lost their competitive advantage to sustain their prolonged existence*”

**Paragraph:** “*First of all, to obtain information, using the internet is quicker and more convenient than reading newspapers. Contrary to the past when people had to wait long hours to take a daily newspaper, nowadays, they can acquire latest news updated every second through their mobile phones or computers connected to the internet, everywhere and at anytime. As can be seen, these devices and machines are very common in all parts of the world, making it easier for people to read a number of things that newspapers cannot provide in only some pages. Hence, the print media has failed to keep its important role in the provision of information.*”

Both, the first and last sentence include a potential claim which both provide a reason for the major claim. If we would select the first sentence as our claim, all premises given in the paragraph would be relevant. However, if we select the last sentence as our claim, the given reasons do not answer the question. So this example illustrates that carefully reading the argument and recognizing the correct standard form is crucial to obtain a good agreement among the annotators. This also includes a careful investigation of discourse markers like “*therefore*”, “*for this reason*”, “*consequently*” etc. In this particular example the last sentence is marked with the discourse marker “*hence*” which indicates that the author concludes the following statement from the previous ones. So in all cases in which the identification of the claim is ambiguous, we select the claim which includes a strong lexical indicator because it is likely that the indicator is included intentionally by the author. So in this argument, we select the last sentence as the claim and check if the given reasons are relevant to it. Consequently, the claim in this argument is “*print media (newspapers) has failed to keep its important role in the provision of information*”. As reason the author states, that the internet is more convenient, quicker and almost available everywhere. However, these reason do not justify that newspaper failed to provide information. Newspaper still provide information although there is a novel medium which is quicker, more convenient etc. Therefore, we annotate the argument with a relevance issue.

Example 2.4 illustrates a contra argument which attacks the stance of the author and the major claim respectively. The topic is “*Should students do physical exercises at school or focus on academic studies only*”. The authors’ stance is that “*physical education should not be outweighed*”. However, the paragraph includes an argument supporting physical exercises. In these cases we just negate the major claim and evaluate the entire argument as described in previous examples.

**Example 2.4 (essay011\_1):**

**Prompt:** “*Some people say that physical exercise should be a required part of every school day. Other people believe that students should spend the whole school day on*

academic studies. Which opinion do you agree with? Use specific reasons and details to support your answer.”

**MajorClaim(s):**

- (1) “the physical education part should not be outweighed”
- (2) “the more attention is withdrawn to a problem of physical education, the more influence we can get on academic success of students”

**Paragraph:** “First of all, the ancient Latin proverb says: “*Anima sana in corpore sano*”, which means that healthy body is basis for healthy soul. There is a direct linkage between people’s health and the frequency of doing physical exercises. The more we practice, the better we feel. Additionally, there is a fact that one can improve health conditions with everyday physical activity: gradually, step by step we change physical condition to better. So, if the entire nation, from their school ages begin going for sports and try doing that everyday, eventually it may help to build healthy nation.”

The claim of this argument is visible in the entire paragraph. Each sentence actually states the same connection between physical exercises and health. So the claim is that “*Doing sport improves health conditions*”. However, none of the sentences answers the question why regular sport activities improve health conditions although the paragraph includes some discourse connectors like “*additionally*” and “*so*” which denote a reasoning structure between the statements. Therefore, we annotate the argument with the relevance flaw<sup>1</sup>.

Example 2.5 illustrates an example in which the entire paragraph is not relevant to the major claim. The topic of the essay is that “*email and text messaging is a threat for written language*” and the author agrees on it by stating that “*they (email and text messaging) decrease the position of written language*”.

**Example 2.5 (essay015\_1):**

**Prompt:** “Email and text messaging have transformed communication but they are seriously threatening the status of written language. How far do you agree or disagree with this statement?”

**MajorClaim(s):**

- (1) “they may be factors decreasing the position of written language”
- (2) “we cannot deny the threat from email and text messaging to the status of written language because their obvious popularity”

**Paragraph:** “First of all, it is easy to point out many benefits users can get from email and text messaging, which answers to the question of their great popularity. Before email and mobile phone, human beings communicated by meeting directly, sending letters or later, calling from home phones. Such ways usually made people have troubles for the expensiveness, difficulties in far communication or emergency and the loss of information. However, email and cell phones have improved the obstacles above. People can send or receive electronic letters anywhere and anytime they want. Especially, thanks to the function provided by email and text messaging (SMS), it is cheaper and faster to transfer a lot of information, even to many people at the same time. They are so convenient that the majority of population prefer to use them instead of some traditional ways.”

The author mainly emphasizes the benefits of emails and text messaging. However, none of the statements in the paragraph refers to the resulting threat to written

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<sup>1</sup>Note that in contrast to an unwarranted assumption, this paragraph includes indeed a reasoning structure which is indicated by discourse connectors whereas an unwarranted assumption is a claim without any evidence.

language. So the entire paragraph does not answer the question why emails and text messaging threatens written language and therefore the ‘argument’ cannot be considered to be relevant to the topic.

Example 2.6 is about the influence of television to the communication among friends and family members. The author agrees that television has a negative effect on the communication.

**Example 2.6 (essay017\_3):**

**Prompt:** *“Do you agree or disagree with the following statement? Television has destroyed communication among friends and family. Use specific reasons and examples to support your opinions.”*

**MajorClaim(s):** *“television devastate families ties”*

**Paragraph:** *“Last but not least, some television programs have a negative effect on viewers. Some thriller or action movies advertise negative activities such as doing criminal activity. These genre of programs has more negative effects on our teenagers. They usually try to mimic what they see on movies in their daily behaviors.”*

However, the paragraph includes another aspect namely influence of television programs on teenagers which is not relevant to the communication.

Example 2.7 is about gender equality in universities. The author agrees that universities should allow equal opportunities for all genders.

**Example 2.7 (essay018\_2):**

**Prompt:** *“Universities should accept equal numbers of male and female students in every subject. To what extent do you agree or disagree?”*

**MajorClaim(s):** *“universities must open choice for everyone to select his subject”*

**Paragraph:** *“However, the current job market affects the decision of universities. Every university designs its courses according to the need of employers. The job selection criteria are pre decided. For instance employers need male candidates for the heavy work such as repairing and installation of heavy machine. They prefer male staff for night shifts. They want female candidates for soft natured work like counseling, teaching, designing etc. Therefore, universities follow the requirement of job providers and decide subject suitable for particular gender.”*

The paragraph includes a contra argument with the claim that *“the job market affects the decision of universities”*. As reasons the author states that universities design their courses according to the needs of employees which assumes the truth of the claim. Another reason employees prefer a particular gender for specific tasks which does not answer the question why universities prefer a particular gender for a specific subject. So the first reason is not relevant to the actual question (claim) and the other is just a reformulation. No given reason actually answers the question; thus the argument includes a relevance flaw.

# Chapter 3

## Acceptability

The reason of a good argument should be based on indisputable common knowledge or facts because if the reasons given for supporting a claim are not acceptable, it is very unlikely that a particular audience will believe the claim to be true. So, we will assign the acceptability flaw to all arguments which reasons are false, highly questionable, unwarranted or if there is a good reason for not accepting the reasons. Note, that we will only assess the premises or claims which are unsupported (argument components which do not have any support). The following examples illustrate acceptability flaws.

The topic of example 3.1 is “*television destroys communication among friends and family members*” and the author agrees that “*television devastates family ties*”.

**Example 3.1 (essay017\_1):**

**Prompt:** “Do you agree or disagree with the following statement? *Television has destroyed communication among friends and family. Use specific reasons and examples to support your opinions.*”

**MajorClaim(s):**

- (1) “*television devastate families ties*”
- (2) “*it is a global problem to solve this problem and it is need global contribution to find a solution*”

**Paragraph:** “*In spite of enjoying watching television shows, it is really time consuming task. Emergence of new television channels or shows are not surprising. We kill time by tracking these channels so at the end of the day we understand it is late for doing any other activities. This is a problem that suffers all of us everyday. At the end, there is no time for call to our parents or friends.*”

The claim of the argument is present in the first and last sentence. It states that “*watching television is so time consuming that there is no time to communicate with parents and friends*”. As reasons the author states that “*novel television channels and shows emerge frequently*” and that “*by tracking these programs there is no time for doing other activities (like communicating with friends and family members)*”. So the author implicitly assumes that we (maybe everyone) assign a higher priority to watching television than to communicating with our friends and family members. This assumption is not warranted and relatively unlikely. So the argument is not acceptable.

Example 3.2 includes several aspects and also a rebuttal. The prompt asks the student if funding primary education or higher education is more important for the

development of a country. The author is of the opinion that both are important for the development of a country.

**Example 3.2 (essay008\_2):**

**Prompt:** “For successful development of a country, should a government focus its budget more on very young children education rather than universities?”

**MajorClaim(s):**

- (1) “a government is supposed to offer sufficient financial support for both”
- (2) “a government should spare effort on young children education as well as universities”

**Paragraph:** “That’s not enough, for higher education, which represent the cutting edge of a country’s academic achievements, act as the vanguard in economic and social advance. The high technology and new ideas applied into practice may not only lead a country to flourish but also elevate its status in the international community. Some may argue that universities can support themselves well by donation or invention, but this argument is invalid. Researches into humanities and art still need large amount of money, what’s more, government’s big budget on universities may attract more excellent intellectuals and researchers into the country and enjoy a higher reputation worldwide.”

The paragraph includes several aspects and thus several arguments. In such a case we will evaluate each aspect/argument individually. The first two sentences are about the economic aspect. The claim is that “*higher education fosters economy*”. A reason is indicated in the first half of the second sentence which states that “*technologies (which are a result of research in higher education) can be applied in to practice*” and that “*these technologies have an economic value*”. Note that the second half of the sentence is related to another aspect/argument explained later. Since there is at least some kind of justification for the claim which seems to be reasonable, this aspect/argument is acceptable. The third and first half of the fourth sentence includes a rebuttal which we will not evaluate in this study. The second half of the last sentence states that “*government’s big budget will attract researchers into the country and results into a higher reputation in the international community*”. So the two aspects of this paragraph are economy and international reputation. The claim of the economy has a justification (admittedly it is a vague one). However, the second claim that “*funding universities will increase the reputation of country*” is not justified. There is no premise which supports the claim. Therefore, the paragraph includes an unwarranted assumption. A claim (direct reason for the major claim) which has no justification. We consider these unwarranted claims as not acceptable since students are asked to include evidence. Thus we annotate the entire paragraph as not acceptable.

Example 3.3 is about the question if governments should improve roads or public transportation. The authors stance is that governments should support public transportation.

**Example 3.3 (essay010\_1):**

**Prompt:** “Should governments spend more money on improving roads and highways or should governments spend more money on improving public transportation (buses, trains, subways) . Why? Use specific reasons and details to develop your essay”



**MajorClaim(s):**

- (1) *“governments spend more money on buses, trains, and subways investment”*
- (2) *“public transportation systems even have more important advantages”*

**Paragraph:** *“First and foremost, carbon emission cut is significantly essential for protecting the atmosphere. The fact is that the more cars and motorbikes are on roads, the more seriously the ozone layer is damaged. If governments use more money to improve roads, there is a strong likelihood that more people drive their private cars work. This is sure to lead to more carbon emitted into the atmosphere, which can cause skin cancer and destroy the natural environment. Whereas, if there are more good buses, trains, or subways, people are inclined to use less private vehicles, which decreases the amount of carbon released. Obviously, the policy that concentrates money on developing public transportation brings an advantageous impact on earth.”*

The claim of this argument is that *“improving public transportation reduces carbon emission”*. As reasons the author states that by improving roads, it will be likely that more people use their private cars which leads to more emission. The author also justifies her/his claim by stating that it is likely that more people will use public transportation when those are improved. So the claim is well justified. However, the paragraph includes a false statement namely that carbon emission causes skin cancer which is not true. Although, carbon emission might damage the ozone layer which in turn leads to more dangerous sun rays which indeed could cause skin cancer, the author states that the carbon in the atmosphere can cause skin cancer. Since this causal linkage is not directly true, we cannot accept the argument and annotate it with the acceptability flaw. So besides unwarranted claims/aspects, we annotate an argument as not acceptable if it includes false statements.

The topic of example 3.4. is *“animal experiments”* and the author states that animal experiments are required to benefit humans. Note that the first major claim emphasizes the need of animal experiments with respect to particular aspect (testing food and medicine) and that the second major claim generally supports animal experiments. In such a case we will evaluate the relevance of the arguments according to the more general major claim and thus in this example according to the general supporting stance of the author about animal experiments.

**Example 3.4 (essay016\_1):**

**Prompt:** *“Some people think it is acceptable to use animals for the benefit of the human beings. Some people think it is wrong to exploit animals for the human purposes. What is your opinion?”*

**MajorClaim(s):**

- (1) *“it is a dramatically cruel activity to humanity if the latest foods or medicines are allowed to sold without testing on animals”*
- (2) *“the merits of animal experiments still outweigh the demerits”*

**Paragraph:** *“First of all, as we all know, animals are friendly and vital for people, because if there are no animals in the world, the balance of nature will broke down, and we, human, will die out as well. The animal experiments accelerate the vanishing of some categories of animals. In other words, doing this various testing is a hazard of human’s future and next generation.”*

The paragraph includes a contra argument against the stance of the author and thus attacking animal experiments. As in previous examples we will evaluate the argument by negating the major claim. The claim of this argument is present in the

last sentence. It states that “*animal experiments is a hazard of human’s future and next generations*”. As reason the author states that “*animals are vital for humans because of the natural balance*” and that “*animal experiments accelerate the vanishing of particular animals*”. This argument has at least two acceptability problems. First, it assumes that humans will be in danger of extinction if animals disappear which is a debatable statement and not justified by the author. Second, the argument explicitly states that animals experiments accelerate the vanishing of some animals which is highly questionable since animal experiments are usually conducted with particular species. Therefore, the argument is not acceptable.

Example 3.5 is about the question if students should stay at home or live independently from their parents. The authors’ stance is that young adults should live with their parents.

**Example 3.5 (essay019\_1):**

**Prompt:** “*Some young adults want independence from their parents as soon as possible. Other young adults prefer to live with their families for a longer time. Which of these situations do you think is better?*”

**MajorClaim(s):** “*for the young adults it will be better to live with their parents*”

**Paragraph:** “*Living in their own houses will save the young adults a lot of money. If they live separate from their parents they will have to pay for a loan, electricity, water or even for a meal. If the young adults still study they will have to combine studying with working, because they will not have money to pay for everything. There will not be such worries when young adults live in their own home, because parents will take care for them. Moreover, parents will give their children money in order they to focus only on studying.*”

The claim of the argument is that staying at home is cheaper than living in an own accommodation. As reason the author states that living alone requires to pay electricity, water, etc. and that young adults need to find a job account for all these costs. Although, these reason seem to be acceptable the argument assumes that parents will provide money which also explicitly states in the last sentence. Since this is an unwarranted assumption and might not be true in many cases, we will annotate the argument as not acceptable.

# Chapter 4

## Sufficiency

An argument is a good one, if the reasons are sufficient for believing the claim to be true. However, there are arguments which infer a very general claim from one example only. The classical example is the following argument “*My neighbor has an academic degree and is the mayor of our town. Therefore, all mayors have an academic degree*”. The very general claim is inferred from only one sample/instance. So the reason given as evidence is not sufficient for arriving at the very general claim that all mayors have an academic degree. The following examples illustrate this flaw in real arguments:

Example 4.1 illustrates an argument about the topic “*international tourism*”. The author supports tourism by stating that “*tourism contributes to economy and preservation of culture and environment*” in the major claim(s).

**Example 4.1 (essay003\_1):**

**Prompt:** “*International tourism is now more common than ever before. Some feel that this is a positive trend, while others do not. What are your opinions on this?*”

**MajorClaim(s):** (1) “*it has contributed to the economic development as well as preserved the culture and environment of the tourist destinations*”  
(2) “*international tourism has both triggered economic development and maintained cultural and environment values of the tourist countries*”

**Paragraph:** “*Firstly, international tourism promotes many aspects of the destination country’s economy in order to serve various demands of tourists. Take Cambodia for example, a large number of visitors coming to visit the Angkawat ancient temple need services like restaurants, hotels, souvenir shops and other stores. These demands trigger related business in the surrounding settings which in turn create many jobs for local people improve infrastructure and living standard. Therefore tourism has clearly improved lives in the tourist country.*”

The claim of the argument is present in the last sentence of the paragraph. It states that “*tourism has improved life in the tourist country (economically)*”. As reason the author cites one example which shows this improvement. However, only one example is not sufficient for inferring the general claim of the argument. Therefore, the reason given are not sufficient and we annotate the argument with the sufficiency flaw.

The prompt of example 4.2 asks the author to choose an important technological innovation and to provide reasons for the choice. The stance of the author is that

“*technology (in general) helped us to have a more comfortable life*”. Note that we will not evaluate if the claim is relevant to the topic.

**Example 4.2 (essay012\_2):**

**Prompt:** “*Advance in transportation and communication like the airplane and the telephone have changed the way that nations interact with each other in a global society. Choose another technological innovation that you think is important. Give specific reason for your choice.*”

**MajorClaim(s):** “*technology has helped us to have more comfortable life*”

**Paragraph:** “*Another important aspect on technology is transferring money. Today, students can apply for foreign universities much easier than before. Not only with the help of sending email, but also using credit cards to pay all necessary fees online. Therefore, with the advent of internet and online paying systems, you can do many thing at your home easily.*”

The claim of the argument is that “*With the advent of the internet and online paying system many tasks became easier*”. The author supports this claim by stating that students can apply easier for foreign universities and it is easier to pay the necessary fees with the help of these technologies. However, this is only one example for justifying the very general claim. So the given support is not sufficient for justifying the claim.

Example 4.3 is about the question if students should be taught to compete or cooperate. The author supports that students should be taught to cooperate.

**Example 4.3 (essay001\_2):**

**Prompt:** “*Some people think that children should be taught to compete, but others think that children should be taught to co-operate that become more useful adults. What do you think?*”

**MajorClaim(s):**

- (1) “*we should attach more importance to cooperation during primary education*”
- (2) “*a more cooperative attitudes towards life is more profitable in one’s success*”

**Paragraph:** “*On the other hand, the significance of competition is that how to become more excellence to gain the victory. Hence it is always said that competition makes the society more effective. However, when we consider about the question that how to win the game, we always find that we need the cooperation. The greater our goal is, the more competition we need. Take Olympic games which is a form of competition for instance, it is hard to imagine how an athlete could win the game without the training of his or her coach, and the help of other professional staffs such as the people who take care of his diet, and those who are in charge of the medical care. The winner is the athlete but the success belongs to the whole team. Therefore without the cooperation, there would be no victory of competition.*”

The claim of the argument is present in the last sentence (indicated by the term “*therefore*”). It is: “*cooperation is a requirement for being successful in competition*”. The first two sentences include a rebuttal to make the argument stronger. Note again that we will not consider rebuttals in our assessment. As reason for supporting the claim, the author cites olympic games and that athletes require cooperation with team member to win in the competition. However, this reason represent only one example which is not enough for arriving at the very general claim. So we annotate the argument with the sufficiency flaw.

**Example 4.4 (essay012\_3):**

**Prompt:** “Advance in transportation and communication like the airplane and the telephone have changed the way that nations interact with each other in a global society. Choose another technological innovation that you think is important. Give specific reason for your choice.”

**MajorClaim(s):** “technology has helped us to have more comfortable life”

**Paragraph:** “Another technological innovations which help people around the world is related to medical equipments. Biomedical engineers could make a significant effect on increasing life expectancy the world. For example, one of their inventions was related to artificial heart valves which can be count as a turning point in heart surgeries. In the past time doctors used pig heart’s valve to implant, but the patient could not be alive more than 3 years after the replacement. But now, biomedical engineers can make artificial heart valves which works well and doctors can implant them easily.”

The next example (4.5) is again about tourism and the author supports tourism by stating that “*tourism contributes to economy and preservation of culture and environment*” in the major claim.

**Example 4.5 (essay003\_2):**

**Prompt:** “International tourism is now more common than ever before. Some feel that this is a positive trend, while others do not. What are your opinions on this?”

**MajorClaim(s):**

- (1) “it has contributed to the economic development as well as preserved the culture and environment of the tourist destinations”
- (2) “international tourism has both triggered economic development and maintained cultural and environment values of the tourist countries”

**Paragraph:** “Secondly, through tourism industry, many cultural values have been preserved and natural environments have been protected. For instance, in Vietnam, many cultural costumes and natural scenes, namely ‘Trong Dong’ drum performance and ‘Ha Long’ bay, are being encouraged to preserve and funded by the tourism ministry. Without this support and profit from tourism, many traditional cultures would disappear due to its low income works. Thus, tourism has survived many non-tangible cultural values and beauty scenes.”

For supporting her/his stance the author claims that “*tourism has survived many non-tangible cultural values and beauty scenes*”. As reason she/he cites a particular example from Vietnam which is not sufficient to infer this very general claim → sufficiency flaw.

# Chapter 5

## Arguments with Several Flaws

This chapter includes examples of arguments which exhibit several flaws including the expected annotations.

### Example 5.1 (essay012\_1):

**Prompt:** *“Advance in transportation and communication like the airplane and the telephone have changed the way that nations interact with each other in a global society. Choose another technological innovation that you think is important. Give specific reason for your choice.”*

**MajorClaim(s):** *“technology has helped us to have more comfortable life”*

**Paragraph:** *“First and foremost, email can be count as one of the most beneficial results of modern technology. Many years ago, peoples had to pay a great deal of money to post their letters, and their payments were related to the weight of their letters or boxes, and many accidents may cause problem that the post could not be delivered. But nowadays, all people can take advantage of internet to have their own email free, and send their emails to everyone in no time, besides they can be sure if their emails have been delivered or not.”*

Relevance  
Acceptability

### Example 5.2 (essay013\_1):

**Prompt:** *“Agree or disagree:Technology has made children less creative than they were in the past.”*

**MajorClaim(s):**

- (1) *“technology makes children even more creative”*
- (2) *“They kept researching new technology and became successful at a very young age”*

**Paragraph:** *“First, technology inspires children to create new things. Children are curious about everything around them, so when they come across a high-tech product like a cellphone, they will be obsessed with its mysterious functions and eager to know how it works. For example, Bill Gates was attracted by the original huge computer, then he did everything he could to understand how it worked. After he had figured out all the stuff, he then began to promote the computer. In the end, he successfully invented a computer that was easy to use and lightweight. Therefore, instead of interfering children’s creativity, technology actually encourages children to learn and to create.”*

Sufficiency  
Relevance

**Example 5.3 (essay005\_3):**

**Prompt:** “The idea of going overseas for university study is an exciting prospect for many people. But while it may offer some advantages, it is probably better to stay home because of the difficulties a student inevitably encounters living and studying in a different culture. To what extent do you agree or disagree this statement? Give reasons for your answer.”

**MajorClaim(s):**

- (1) “one who studies overseas will gain many skills throughout this experience”
- (2) “living and studying overseas gives the individual a new perspective on the subject that is studied or in general life”

**Paragraph:** “Also, employers are mostly looking for people who have international and language skills. Becoming successful in this study will give the student an edge in job market. Therefore, one who has studied and lived overseas will become more eligible for the job than his/her peers.”

Relevance  
Acceptability

**Example 5.4 (essay013\_1):**

**Prompt:** “Agree or disagree: Technology has made children less creative than they were in the past.”

**MajorClaim(s):**

- (1) “technology makes children even more creative”
- (2) “They kept researching new technology and became successful at a very young age”

**Paragraph:** “First, technology inspires children to create new things. Children are curious about everything around them, so when they come across a high-tech product like a cellphone, they will be obsessed with its mysterious functions and eager to know how it works. For example, Bill Gates was attracted by the original huge computer, then he did everything he could to understand how it worked. After he had figured out all the stuff, he then began to promote the computer. In the end, he successfully invented a computer that was easy to use and lightweight. Therefore, instead of interfering children’s creativity, technology actually encourages children to learn and to create.”

Sufficiency  
Relevance

**Example 5.5 (essay013\_2):**

**Prompt:** “Agree or disagree: Technology has made children less creative than they were in the past.”

**MajorClaim(s):**

- (1) “technology makes children even more creative”
- (2) “They kept researching new technology and became successful at a very young age”

**Paragraph:** “Second, technology widen children’s knowledge. In the past, children were only able to see things from one perspective. However, with highly advanced

*technology, children are able to get information from foreign countries and even communicate with foreign friends. Therefore, they will be able to learn about different cultures and different ways of thinking. Knowledge is the base of creativity. The diverse knowledge that children gained from different parts of the world, inspires children and encourage them to create new things.”*

Relevance  
Acceptability

### **Example 5.6 (essay014\_2):**

**Prompt:** “*Students at schools and universities learn far more from lessons with teachers than from others sources (such as the internet, television). To what extent do you agree or disagree?*”

**MajorClaim(s):** “*students learn far more from their teachers than from other source*”

**Paragraph:** “*Those who feel that students learn far more from other sources, such as the Internet and television, firmly believe that within this sources students learn lots of things which they can’t learn in classes. They can only input some key words and google it, and then there are numberless articles and websites related to it. In this case, students learn things easily. Moreover, they contend that good television programs do teach students. For instance, Discovery Channel has many instructive episodes. Students have knowledge of others cultures, outer space etc.”*

Sufficiency  
Acceptability

### **Example 5.7 (essay017\_2):**

**Prompt:** “*Do you agree or disagree with the following statement? Television has destroyed communication among friends and family. Use specific reasons and examples to support your opinions.*”

**MajorClaim(s):** “*television devastate families ties*”

**Paragraph:** “*Second, I think watching television programs makes us lazy. We usually spend our times in front of television for at least three ours a day when we come back home after eight-hour working in the office. Hence, we do not have time to spend for healthy activity such as going to a gym or doing other sports. This makes us a lazy person who prefers to do sedentary activities like watching television shows rather than be active and sociable.”*

Relevance  
Acceptability



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