

# Guidelines for Annotating Arguments in Persuasive Online Articles

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## Introduction

In this task you will be provided with articles on the topics of sustainable diets, veganism, meat alternatives, effects of food production on the environment, and others.

We would like you to identify the arguments present in the articles and determine how they are related to the author's view.

Likely, you will have your own opinions and may agree or disagree with the contents of the articles, finding some statements to be untrue or even offensive. However, in order to correctly complete the task, it is crucial that you stay objective and follow the described guidelines to the best of your ability.

Formatting such as heading highlighting and links as well as pictures are excluded in order to not influence the annotation process.

In the sections that follow, you are first introduced to the high-level explanation of how to view arguments in this task. Then the concrete guidelines for determining the boundaries of argument components are described. After that, the component types and rules to identify them are provided. Finally, you are presented with the annotation format and the exact annotation steps that ought to be taken. All sections are important and you should only start the annotation process once you have read all the guidelines and looked through the given examples.

## The high-level view of arguments

An argument consists of at least two statements. The simplest argument includes one **claim**, which is then supported or attacked by at least one **premise**.

The **claim** stands for a controversial or polarising statement intended to persuade the reader. It is usually a proposition or assumption and should not be accepted by the reader without additional support. This characteristic distinguishes arguments from explanations where the conclusion is a true statement that is not arguable (e.g. a true event that happened in the past) [1].

The second component of an argument is the **premise**. The author uses it as a support/justification for their claim in order to make it more convincing. The premise may also attack/refute the opponent's claim where the goal is to reduce its plausibility. In more complex arguments premises may express support/attack to the claim indirectly, via supporting/attacking another premise that is then directly connected to the claim.

## Determining component boundaries

Before marking and identifying argument components as well as the relations between them, it is important to understand the boundaries of each individual component.

#### Guidelines:

1. Indicator words or phrases such as “because”, “therefore”, “for example” or “even though” can signal the presence of an argument as in examples **E1**, **E2** and **E4**.
2. Arguments may not always include indicator words, requiring more in depth comprehension of what was intended by the author. In the example **E3** the first sentence is the claim, which is explained/supported by the premise in the second sentence.
3. Components may or may not cover the entire sentence as shown in the example **E2** where the first full sentence is annotated as one component (a premise), while in example **E1** the first sentence contains two components (a claim followed by a supporting premise).
4. Components cannot span multiple sentences, meaning they always start and end in the same sentence.
5. Component text is always continuous, that is, it cannot start at some point, be interrupted by a non-component text or a completely different component, and continue afterward.
6. Annotating several premises in one sentence:
  - a. If premises serve different purposes, they should be annotated separately. This is illustrated in example **E4** where none of the premises in the second sentence have the same exact function (see **E4** description).
  - b. If premises serve the same purpose, they should be annotated as one component. In example **E5** both premises in the second sentence directly support the same claim, thus, they are annotated as one premise.
7. Parts of a sentence that should not be annotated:
  - a. Punctuations at the end of an argument component.
  - b. Indicator words or phrases such as “because”, “therefore”, “for example” or “even though” (examples **E1**, **E2** and **E4**).
  - c. Unnecessary phrases like “I believe that”, “according to the previous fact” at the start of a component should not be included in the components (see example **E2**), unless they contain negations, which change the meaning of an argument, for instance, the claim in the first sentence of example **E4**.
  - d. When in doubt on what not to include in a component, a good rule of thumb is to try to exclude the phrase/words and see if the remaining content still holds the same meaning and can form a valid sentence on its own. Some phrases, for instance, time indicators: “In ancient times” or “currently” are necessary as they add important detail to the argument, without which the meaning of an argument is different.

#### Example **E1**:

[Vegetarian diet is unhealthy]<sub>Claim1</sub> because [plant-based products naturally lack necessary nutrients like vitamin B12 or D]<sub>Premise1</sub>.

Explanation:

Claim1 is supported by Premise1, both components are in the same sentence, indicator word “because” is excluded.

Example **E2**:

[Animal agriculture is extremely taxing on the environment due to pollution that the farms are responsible for]<sub>Premise1</sub>. Therefore, I firmly believe that [we should not continue eating animal based products]<sub>Claim1</sub>.

Explanation:

Claim1 is supported by Premise1, components are in separate sentences, indicator word “Therefore” and the unnecessary phrase “I firmly believe that” are excluded.

Example **E3**:

[A saturated market is a dangerous space to play in]<sub>Claim1</sub>. [Generally, there are only two ways to compete – grow the market itself, or steal market share from others]<sub>Premise1</sub>.

Explanation:

Claim1 is supported by Premise1, components are in separate sentences, and no indicator words are used.

Example **E4**:

[I disagree with the view that plant-based products will dominate in the future]<sub>Claim1</sub>. Even though [their popularity is rising]<sub>Premise1</sub>, [there are strong traditions surrounding meat eating]<sub>Premise2</sub>, for example, [turkeys are still served in most households in the US during Thanksgiving]<sub>Premise3</sub>.

Explanation:

Claim1 is attacked by Premise1, Premise2 attacks Premise1, and finally Premise3 supports Premise2, some components are in separate sentences, and indicator phrases “for example” and “even though” are excluded.

Example **E5**:

[Currently we are not doing enough to set the youth for a more sustainable future]<sub>Claim1</sub>. [Dietary education at schools is inadequate and the variety as well as the quality of plant-based dishes, served in their canteens, are poor]<sub>Premise1</sub>.

Explanation:

Claim1 is supported by Premise1, and the components are in separate sentences.

## Identifying components and relations between them

In the examples so far you have seen a general view of the claim, however, we are interested in 3 specific types of claims: **MajorClaim**, **ClaimFor**, and **ClaimAgainst**.

In the article, **MajorClaim** represents the author's main point directed toward some specific topic. Both **ClaimFor** and **ClaimAgainst** can be interpreted as sub-claims and in the following parts of the guide will be referred to as just claims. The purpose of claims is to either **directly** support (**ClaimFor**) or, in case of a counterclaim (contra argument), attack (**ClaimAgainst**) the author's main view/opinion, represented by the **MajorClaim**.

A **Premise** is a reason given for supporting or attacking an argument, therefore, it can be considered as justification or refutation for convincing the reader of the truth or falsity of a

claim. Often premises are used to explain claims, illustrate examples proving a point, reference a study that attempts to prove or debunk a claim and so on.

Besides the components, we also have two relations, namely **Support** and **Attack**, which link **Premises** to other components.

Guidelines:

1. Identifying claims:

- a. A statement that is not argumentative should not be considered a claim. However, it might still be used in an argument in the form of a premise, to convey support/attack toward some claim. For instance, in the second sentence of example **E6**, a figure is quoted from a research. Text is marked as a premise since it supports the claim in the previous sentence.
- b. Common types of statements that are **not** claims:
  - i. Well-known facts or historic events:
    1. "About 71 percent of the Earth's surface is water-covered, and the oceans hold about 96.5 percent of all Earth's water."
    2. "The American Civil War was a conflict fought between 1861 and 1865 in the United States."
  - ii. Personal preference or experience:
    1. "I'd much rather eat something that is more expensive but sustainable than feel guilty for negatively contributing to climate change."
    2. "In my interactions with people, who suffer from unhealthy eating habits, I've noticed that many of them were never properly introduced to the basics of good nutrition."
  - iii. Citing a research:
    1. "A recent study found that hybrid vehicles may emit considerably larger amounts of CO2 than officially reported by the manufacturers."
- c. There can only be one **MajorClaim** in the article, however, it can be paraphrased multiple times, thus, all of the repeating occurrences should be annotated separately (see example **E7**).
- d. **MajorClaim** usually, but not necessarily, is stated at the beginning of the article, in the introductory section, and then potentially restated in other parts of an article, most often in the concluding paragraph if the article has one, as shown in example **E7**.
- e. There can be many regular claims (**ClaimFor** and **ClaimAgainst**) in the article. To determine whether a regular claim is ClaimFor or ClaimAgainst,

one should consider the claim's stance toward the major claim (see **E6** and **E7**).

- f. A sentence may contain the **MajorClaim** and another component, which expresses a view that is for or against the **MajorClaim**. Such components must be annotated as either **ClaimFor** or **ClaimAgainst**.
- g. Major claims and regular claims may start with opinion expressions such as “In my opinion”, “I strongly believe that” or indicator phrases like “Therefore”, “This follows that” as illustrated in example **E6**.
- h. Sometimes claims do not start with opinion expressions or indicator phrases. For instance, in example **E7**, even though the author expresses their stance in the second sentence, it does not include any content-relevant information of an argument. Therefore, the view, referenced in the first sentences, should be annotated instead.
- i. In some cases regular claims can be without any related premises that would express support or attack toward these claims (see last paragraph of example **E6**).
- j. Claims formulated as questions:
  - i. When a question prompts someone to consider a particular point of view that is arguable, it should be annotated as a claim. In the example **E6** second to last question claims that there are many people who take part in activities damaging the ocean, however, it may be argued that this is an exaggeration.
  - ii. However, too general, obvious answer or rhetorical questions are not claims. For instance: “Why are we so irresponsible?” or “How can we claim to care about the environment and still use single-use plastic?”.

2. Identifying **Premise** components and how they relate to other components:

- a. Like regular claims, there can be many **Premise** components present in the text.
- b. A **Premise** expresses justification or refutation to another component via **Support** or **Attack** relations:
  - i. In the simplest and most common case, a premise is linked directly to a regular claim (**ClaimFor/ClaimAgainst**) with **Support/Attack** relation. This is shown in arguments from example **E6**.
  - ii. In other cases **Premise** can instead be connected to another **Premise**, thus, forming an indirect relation to a claim via intermediate components (can be more than one). Example **E7** illustrates such a case, where in the third paragraph a claim is supported by the first premise, while the second premise attacks the first one.
- c. A **Premise** can only be related to exactly one other component and it cannot be itself.

- d. A component (premise or regular claim) can be supported/attacked by more than one premise.
  - e. In more complex situations it is possible for premises to form longer chains of reasoning, which end with regular claims (see example E4).
  - f. Usually premises are located close to other components they relate to, for instance, in the same paragraph or section in an article.
  - g. In rarer cases arguments might span multiple paragraphs. One example of such a situation could be when one claim is given in a starting paragraph, while the following paragraphs contain premises that express support/attack to the claim. Thus, premises from the later paragraphs should still be connected to the claim from the previous paragraph via **Support/Attack** relations.
  - h. There could also be instances when it may seem that a premise can potentially be connected to several other components. In such cases prioritise the component that is located closest and link the premise to it. For instance, in example E6, the last premise seems fit to support any other component in the last paragraph. However, the link is drawn to the previous annotated component because it's the closest to the premise.
3. Sometimes it is difficult to tell whether a component of an argument is a regular claim or just a premise that should be connected to another component. It is advisable to consider:
- a. Whether this component has a direct stance toward the major claim. If so, then it is a regular claim.
  - b. On the other hand, if it seems that the component better fits an auxiliary role (i.e. an explanation or an example) then it should be annotated as a premise and connected to another component it relates to.
4. If two or more potential premises seem to drive a similar point and there is no obvious regular claim to connect them to, it may be that one of the premises is actually a regular claim.
- a. In such a case, choose the one that appears to be most general (i.e. concluding) and annotate it as a regular claim (**ClaimFor/ClaimAgainst**).
  - b. Then annotate the remaining components as premises that **Support** the regular claim.
  - c. Again, it is important to remember that the selected regular claim should convey a view toward the major claim, if it is not the case, then, none of the potential premises should be annotated at all.
5. A piece of text that is neither argumentative (claim) nor related to an argument (premise) should not be annotated at all. **E7** exemplifies such a case. In the second paragraph a general experience is described, which neither claims something nor

supports/attacks a claim. Second sentence in the paragraph is used to raise intrigue and provoke the reader.

**E6** and **E7** show more complete annotated examples of the two articles with their titles, and brief explanations of how components are related to each other.

Example **E6**:

Title of the article:

Sustainable Fishing: Balancing the Needs of People and the Ocean

Excerpt from the article:

First, it is important to note that [fishing is essential for human livelihoods, especially in the developing countries]<sub>ClaimAgainst1</sub>. According to The Food and Agriculture Organization (FAO), [in Bangladesh, Cambodia, Gambia, Ghana, Sierra Leone or Sri Lanka, the dependency on fish for protein intake is over 50%]<sub>Premise1</sub>. However, in my opinion, [we should not overlook the damage caused to the marine ecosystem and strive for stronger regulations in the fishing sector]<sub>MajorClaim</sub>.

[One of the biggest issues is the use of destructive fishing methods]<sub>ClaimFor1</sub>. [A prime example of this is dynamite fishing, while illegal, it is still practised in some areas and can cause widespread destruction to marine life and habitats]<sub>Premise2</sub>. [Why are there still so many that take part in such terrible practices]<sub>ClaimFor2</sub>? [Maybe the desire for quick profits is all it takes to forget the morals]<sub>Premise3</sub>?

[We need to urge the ones in power to take action in order finally crack down on detrimental fishing practices]<sub>MajorClaim</sub>. Otherwise, [not only the marine ecosystem will suffer but we, humans, as well]<sub>ClaimFor3</sub>.

Explanation:

The author expresses their view toward the topic of the article in the MajorClaim, which is supported by ClaimFor1 while attacked by ClaimAgainst1. ClaimAgainst1 is supported by Premise1, ClaimFor1 is supported by Premise2. Lastly, Premise3 supports ClaimFor.

Annotation:

Components:

1. **ClaimAgainst1**: [fishing is essential for human livelihoods, especially in the developing countries]
2. **Premise1**: [in Bangladesh, Cambodia, Gambia, Ghana, Sierra Leone or Sri Lanka, the dependency on fish for protein intake is over 50%]
3. **MajorClaim**: [we should not overlook the damage caused to the marine ecosystem and strive for stronger regulations in the fishing sector], [We need to urge the ones in power to take action in order finally crack down on detrimental fishing practices]
4. **ClaimFor1**: [One of the biggest issues is the use of destructive fishing methods]
5. **Premise2**: [A prime example of this is dynamite fishing, while illegal, it is still practised in some areas and can cause widespread destruction to marine life and habitats]
6. **ClaimFor2**: [Why are there still so many that take part in such terrible practices]



7. **Premise3:** [Maybe the desire for quick profits is all it takes to forget our morals]
8. **ClaimFor3:** [not only the marine ecosystem will suffer but we, humans, as well]

Relations:

1. **Support(Premise1, ClaimAgainst1)**
2. **Support(Premise2, ClaimFor1)**
3. **Support(Premise3, ClaimFor2)**

Example **E7:**

Title of the article:

This World Plant Milk Day, A Reminder Of Why The Future Must Be Dairy-Free

Excerpt from the article:

Nowadays, there are some who claim that [dairy is an unsustainable industry that contributes to the climate crisis and causes untold misery]<sub>MajorClaim</sub>. I agree with this point of view and will give several reasons why.

Growing up, many of us read or watched wholesome stories about caring farmers lovingly milking their animals. So where does all of this “negativity” regarding animal cruelty come from?

[Cows used in the dairy industry have been selectively bred to produce around 4.5 times more milk than they naturally would]<sub>Premise1</sub>. This means [they often suffer from mastitis, a painful udder inflammation]<sub>ClaimFor1</sub>.

For many people, [dairy farming brings up picturesque views of cows in fields]<sub>ClaimAgainst1</sub>. It's true that [UK dairy cows are generally allowed to graze on pasture in spring and summer]<sub>Premise2</sub>, but [they are stuck indoors for the other six months of the year]<sub>Premise3</sub>.

Lastly, [dairy is terrible the environment, faring worse than plant-based milks in every respect]<sub>ClaimFor2</sub>.

[Per liter of milk, dairy uses 8.95m<sup>2</sup> of land (the second highest, oat milk, uses 0.76m<sup>2</sup>)]<sub>Premise4</sub>. [The same liter of dairy also requires 628.2 liters of freshwater (the second highest, almond milk, requires 371.46 liters)]<sub>Premise5</sub>.

In conclusion, [dairy is a hugely unsustainable industry that subjects millions of animals to a lifetime of misery]<sub>MajorClaim</sub>.

Explanation:

The author expresses their view toward the topic of the article in the MajorClaim, which is mentioned twice: at the beginning and at the end of the excerpt. It is then supported by ClaimFor1, ClaimFor2 and attacked by ClaimAgainst1. ClaimFor1 is supported by Premise1. ClaimAgainst1 is supported by Premise2, which is then attacked by Premise3. ClaimFor2 is supported by both Premise4 and Premise5.

Annotation:

Components:

1. **MajorClaim**: [Dairy is an unsustainable industry that contributes to the climate crisis and causes untold misery], [Dairy is a hugely unsustainable industry that subjects millions of animals to a lifetime of misery]
2. **Premise1**: [Cows used in the dairy industry have been selectively bred to produce around 4.5 times more milk than they naturally would]
3. **ClaimFor1**: [they often suffer from mastitis, a painful udder inflammation]
4. **ClaimAgainst1**: [dairy farming brings up picturesque views of cows in fields]
5. **Premise2**: [UK dairy cows are generally allowed to graze on pasture in spring and summer]
6. **Premise3**: [they are stuck indoors for the other six months of the year]
7. **ClaimFor2**: [dairy is terrible the environment, faring worse than plant-based milks in every respect]
8. **Premise4**: [Per liter of milk, dairy uses 8.95m<sup>2</sup> of land (the second highest, oat milk, uses 0.76m<sup>2</sup>)]
9. **Premise5**: [The same liter of dairy also requires 628.2 liters of freshwater (the second highest, almond milk, requires 371.46 liters)]

Relations:

1. **Support(Premise1, ClaimFor1)**
2. **Support(Premise2, ClaimAgainst1)**
3. **Attack(Premise3, Premise2)**
4. **Support(Premise4, ClaimFor2)**
5. **Support(Premise5, ClaimFor5)**

## Annotation format

Annotation format is illustrated with **E6** and **E7** examples. For each article you are expected to identify the components (**MajorClaim**, **ClaimFor**, **ClaimAgainst** and **Premise**) by copying the exact pieces of text according to the [Determining component boundaries](#) section and placing them in square brackets [...]. Only for the **MajorClaim** component there can be more than one excerpt of text. Components (except **MajorClaim**) should be numbered as they appear in the text (**Premise1**, **Premise2**, **ClaimFor1**, **ClaimAgainst1**, **ClaimFor2**, etc.).

For relations, provide their keywords (**Support** and **Attack**) and inside of the round brackets write the names of the two related components separated by a comma. The first component should express support or attack for the second component in the brackets.

## Performing the annotation

The annotation task should be carried out in 5 steps one after the other:

1. Briefly read the whole article to understand its general idea and at the same time work on identifying the **MajorClaim** occurrences.
2. Inspect parts of the article in more detail to annotate the regular claims (**ClaimFor/ClaimAgainst**) considering their stance toward the **MajorClaim**.
3. Look for statements that directly support or attack the regular claims. Mark such statements as **Premise** components and indicate the specific relations (**Support/Attack**) between each **Premise** and a regular claim.

4. Consider statements that express relations toward the premises annotated in the previous step. Similarly to the previous step, annotate each such statement as a **Premise** and note the relation (**Support/Attack**) between it and another premise.
5. Continue annotating and linking premises by performing step 4 until there is no statement that seems to be a premise, which could be connected to some other premise.

## References

[1] Annotation guidelines designed for Parsing Argumentation Structures in Persuasive Essays (<https://aclanthology.org/J17-3005>). Christian Stab and Iryna Gurevych. 2017.