Annotation Guidelines

COSI 140: Argumentation Strategy Annotation Michael Zhong, Meiqi Wang, Hayley Ross

Corpus

The Webis-Editorials-16 corpus was developed by Al Khatib et al in 2016. The editorials were selected from Fox News, The Guardian, and Al Jazeera to represent diverse cultures and styles. 100 random editorials were selected from each source based on the following criteria:

- 1. They were published over the same time interval (December 2014 and January 2015)
- 2. They had at least 5 comments;
- 3. 3. They contained at least 250 words. The rationale behind the criteria was that the same time period would facilitate topic overlap between the sources, the presence of multiple comments meant that the editorial had led to a discussion, and the length would filter out short texts that did not contain much argument.

The corpus has been processed and is available online. We have performed additional processing to ensure that the editorials can be readily loaded into MAE and to facilitate the annotation procedure.

Segments to Annotate

The basic unit of annotation is a full sentence, i.e. from one sentence final punctuation mark (period, question mark, and exclamation mark) to the following one. All sentences should be annotated, and those that do not seem to be a part of the argument will be tagged as such. This way, the entire document will be annotated and available to the machine learning algorithm of choice.

Note that line separators are different between OS and could lead to different tag spans. Therefore, do not include whitespace around sentences and paragraphs, although minor misalignment between annotators (e.g. within 1-2 characters) is fine. In general, however, be careful with the sentence boundaries as MAE can be unwieldy.

Additionally, there are a couple edge cases that require attention.

First, conjunctions could be problematic, where 2 components of a conjunction could potentially belong to 2 different tags. The general rule of thumb is to tag it with a more general tag (e.g. if a

testimony is alongside an assertion, tag the entire sentence as assertion). We will explain the decision process in more details below.

Second, long quotations could span multiple sentence final punctuation marks. In this case, tag the entire speech as testimony. For example:

As a Taliban spokesman put it bluntly: "Our objective is to force the foreigners to flee Kabul. Before, the foreigners were visible in the provinces. Now that they have limited more of their activities to Kabul, we have also gone to Kabul to target them there."

Our scheme will treat the above sentences as a single segment.

Tags

We are using the following tags:

- Assertion
- Fact / Testimony
- Anecdote
- Rhetorical Question
- Insult
- Not Part of the Argument
- Other Form of Argument

The next sections will go over each tag in detail.

Assertion

Assertion is the main category for arguments. Assertions include any claims made by the author which are personal opinion, which may not be true, which not everyone would agree with, or are simply not backed up by any source. This includes statistics when no source is provided (statistics with a provided source such as a paper count as Testimony), and vague attributions which don't provide a verifiable source such as "it is reported" or "some say".

Note that we are not making any judgements about the truth or falsity of the sentence: if you find a statement such as "The United States is 500 years old.", you should still tag it as an assertion.

Since we are tagging whole sentences, if any part of the sentence is an assertion, then the whole sentence should be tagged as an assertion.

Examples of this tag include:

"It will take more than a new Congress in 2015 and a new president in 2017 to save us from the fate of other empires."

"A reference is immediately invalid once money changes hands."

"As 2014 ends, the stock market is at record highs but our traditional institutions and self-confidence are in decline."

"It is often said that rampant Afghan corruption and lack of capacity would result in misuse and waste of donors' funds."

To help identify assertions, consider the following questions:

- Does the statement express the opinion of the author?
- Would others (e.g. with different political beliefs) disagree with the statement?
- Is it difficult to verify if the statement is true? (For example, would you have to conduct your own research study or survey a large number of people?)
- Does the statement attempt to give a source, but uses vague language such as "it is reported" or "some people say"?
- Does the statement describe a fact or event, but in a very biased, leading, or polarising way? (That is, does it convey more than just the fact that the event happened.)

Fact / Testimony

This tag covers both established facts and statements with a given source, i.e. testimonies, since these are viewed as fact by the author for the purposes of the argument.

A fact is defined, for the purposes of this annotation, as anything that could be looked up on Wikipedia or in a similar authoritative source such as a history book. This includes descriptions of past events at given points in time (even if so specific that they would not make it onto Wikipedia), but not broader statements such as census statistics (without an accompanying source) which might change over time and/or cannot be calculated with certainty.

Testimony includes all statements, regardless whether true or false, which come with an accompanying source, be it scientific study, other newspaper or quoted person.

If the quote or testimony spans multiple sentences (and it is clear from context that all of them are attributed to this source), then each sentence should be tagged separately as fact/testimony.

Examples of the fact/testimony tag include:

"The Declaration of Independence defines our personal liberties as inalienable aspects of our humanity."

"At the end of October, British forces lowered the flag at Camp Bastion."

"On Thursday, the so-called London Conference on Afghanistan will convene."

"A Pew Research Center study confirms one trend that has been obvious over several years. Just 46 percent of American children now live in homes with their married, heterosexual parents. Five percent have no parents at home. They most likely are living with grandparents, says the study."

To identify facts/testimonies, the following questions can be helpful:

- Is there a given source such as a paper, book or person who said this?
- Does this describe a historical event?
- Could you find this information on Wikipedia or in another similar source?
- Would everyone (even e.g. with different political beliefs) agree that this is true? (Or that it is true that the person, book or paper said so.)
- Is the language unbiased, dry and/or factual?

Anecdote

Anecdotes include stories or personal experience used to develop the author's argument. They may span multiple sentences (in which case each sentence should be annotated as an anecdote).

Examples include:

"There is multitude of examples in the international community's flawed, if not disingenuous, aid programmes and their monitoring in Afghanistan. I was hired by a US consultancy firm to map out the field and offer recommendations for the design of a multimillion dollar governance project. My report and recommendations, it turned out, were too radical."

Questions to identify anecdotes:

- Does it use personal pronouns, such as 'I' or 'me'?
- Is it a story about someone's personal experience? Is it about the author or someone who the author knows (but the reader probably doesn't know)?
- Does the author uses the anecdote to prove his/her argument?
- Is the anecdote purely an anecdote or does it involve any testimonies or facts?

Rhetorical Question

Rhetorical question refers to questions the author raises in the article while illustrating certain argument or fact, it may appear as a form of question or question with answer coming after it. Most of the questions appearing in the corpus are rhetorical questions.

Examples:

"Is charging someone for a reference after refusing to pay them as scummy as it gets? Sadly not."

"What explains this spate of violence, and is it a portent for the future of Afghanistan?"

"Do these not define America at the end of 2014?"

Questions:

- Is the sentence a question?
- Does the question get answered or addressed later (implicitly or explicitly), or is it clear what the answer should be?
- Does the author raise the question to pose another topic to be discussed?
- Is the argumentation strengthened after the author poses the question?

Insult

For the purpose of this project, we define an insult as an attack on a person's character, behaviour, appearance, gender, race or other personal traits - regardless whether it may be justified or not.

"The radio shows aired at a pivotal moment for Carlson's career, when he was transitioning from a bow tied conservative commentator for CNN and MSNBC with pretensions to seriousness into a full-throated avatar of the Republican party's sexist and racist id."

Questions:

- Does it target a person?
- Does it criticise a person's character or behaviour (fairly or unfairly)?
- Does it attack a person's race, gender or other categories they may identify as?
- Does it use colourful or emotional language?
- Does it use a derogatory name, description or nickname to describe the person?
- Would it be rude to say this to a person's face?

Not Part of the Argument

This category includes content such as headings, picture captions, greetings, and other segments of text in the article which do not form part of the argument, i.e. are not trying to persuade the reader of anything.

"In this Dec. 10, 2012 file photo, fog obscures the Capitol dome on Capitol Hill in Washington." "Where the funds go" [on its own, separate line] "Good morning America."

Questions to ask:

- Is it a piece of markup such as a caption or heading?
- Does the sentence (not) convey anything related to the topic of the article?

Other Form of Argument

This category includes any statements that seem to be part of the author's argument, but don't fall into any of the categories above. In particular, this includes sarcasm, as well as fragments of sentences (such as answers to rhetorical questions).

Decision Processes Between Tags

Assertion vs. Fact/Testimony

There are a number of boundary cases between assertion and fact/testimony.

Obscure Facts

Some statements may appear to be facts but are so specific or obscure that the reader may not be sure if they are true. In these cases, the following questions help:

- Could I find this on Wikipedia (if I looked hard enough) or in a reference book on the subject?
- Is it a description of something that happened in the past or will happen in the future, at a particular point in time?
- Does it feel like the author is just reporting news?
- Does the author take it to be plain, uncontroversial fact? (And at least one of the other questions is answered with 'yes'.)

If the answer to at least two of these is yes, it is a fact. In general, we give the author the benefit of the doubt and assume that such statements are facts.

The following are thus facts:

"As part of the agreement, donors pledged support and the Afghan government promised to implement reforms and curb corruption."

"The International Security Assistance Force (ISAF), a US-led group that includes NATO members and others, winds up its mission on New Year's Eve."

However, the use of numbers and statistics is a sign that it might be an assertion:

[&]quot;Sadly not."

[&]quot;And the winner is ..."

[&]quot;Take life."

[&]quot;Clearly, this will magically lift all children out of poverty at no cost to the taxpayer."

- Are statistics used as a main part of the assertion but not attributed to a source? Would these numbers be difficult to verify or are they subject to change over time? (Or depending who you ask?)
- Does the statement describe an aggregated count, view or summary over a longer period which would be difficult to verify without conducting a serious study, census or survey?

So this is an assertion:

"For one thing, the ANSF are doing much of the fighting themselves, with drastic effects on casualties: over 9,000 Afghan troops have died since 2013, four times greater than the entire American death toll since 2001."

Polarising, Leading or Emotional Language

If a fact is described with sufficiently polarising or leading language, it is no longer just a fact: it is now conveying something about what the author thinks about that fact. This is an assertion.

"And we know that every last civil suit brought by CIA torture victims has been dismissed on national security grounds."

"As it stands right now, torture is a crime – but so is revealing evidence of torture that the CIA wants hidden."

Paraphrases of Quotes

This also applies to paraphrases of quoted material that don't appear to be implied from the quote. For example, in the following two sentences, the first is a valid fact/testimony but the second is an interpretation that doesn't obviously follow from the quote, and so an assertion.

"Glubb says the 250-year average of empires has not varied in 3,000 years, but we don't learn from history because "our studies are brief and prejudiced." He means they are mostly about one's own country."

Fact/Testimony vs. Anecdote

Some facts may be obscure or culture-related and may seem to be serving as anecdotes. For example, one article opens with a description of a scene from a movie, before launching into an discussion of issues only tangentially related to the movie.

"In the film, "Girl Interrupted," Winona Ryder plays an 18-year-old who enters a mental institution for what is diagnosed as borderline personality disorder."

Ultimately, this is a fact, since it is true and verifiable (say, on IMDB) that this happened, even if the author may be using it like an anecdote. So, these are classified as facts, and we do not attempt to second-guess the author's intention of putting this particular fact in this particular place (whether it is meant as an anecdote or not).

Sentences with Multiple Categories

Assertion and Fact/Testimony or Assertion and Anecdote

Sometimes a sentence may contain multiple statements which fall into multiple categories, for example if it is a conjunction. For example, in the following sentence the first part could be considered a fact but the statement about decline is much more subjective:

"As 2014 ends, the stock market is at record highs but our traditional institutions and self-confidence are in decline."

As a rule of thumb, the sentence should always be categorised as the "weakest" tag. Assertions are "weaker" than facts/testimonies or anecdotes (both of which are assumed to be true, with differing degrees of relevance), so in these two cases the whole sentence should be tagged as an assertion.

Insult and Assertion or Insult and Fact

Sentences with insults may also contain an assertion or fact. In this case, however, we prefer the insult as it is "weaker" (less relevant to the logical argument) than the assertion or fact.

So for example this sentence contains factual information about the politician, but also an insulting description of his behaviour. This should be considered an insult, as the insult "pulls down" the rest of the sentence to its level.

"Consider Jair Bolsonaro, the "Trump of the Tropics", who leads the field in the Brazilian election, wielding rape references as rhetorical weapons.

Flowchart

	1. Is it: a question?	>	2. Is it: an anecdote?	3. Is it: an insult?	
	If so, does it feel like a rhetoric question? If yes, tag as rhetoric question. If not, tag it as other form of argument. If it is not a question, proceed to step 2.		If there is an explicit mention of personal experience, it is an anecdote. If not, proceed to step 3.	If a personal attack is present, it is an insult. If not, proceed to step 4.	
	4. Is it: a fact or testimony?	>			
	If it is an obvious objective fact or there is direct citation of a source, it is a fact or testimony. If not, proceed to step 5.		If it is a claim or a statement without any sources, it is an assertion. This is the general category. If it is difficult to tag, proceed to step 6.	If it still feels relevant to the topic, it is tagged as other forms of argument. If not, it is tagged as not an argument. End of decision process.	

General Tips for Annotating News

We have tested our scheme on randomly selected articles from the corpus and have compiled a list of general tips.

First of all, although news sources are generally understood to be focused on objective reporting and information sharing, they have been evolving over the recent years and note that the editorials themselves are similar to opinion pieces and columns, meaning that they are prone to the influence of authorship. Therefore, it is possible that annotators could encounter articles that touch on sensitive topics, include controversial issues, and employ colorful language. In these cases, it is important to, as the annotator, remain impartial and follow the guidelines we have provided even if the "gut feeling" could be contrary.

For example, if an unpopular opinion is quoted from a person or a book, it will still be tagged as "Fact/Testimony" as a reference is available, even if that opinion may prove factually incorrect. Furthermore, if an assertion is very agreeable or appears highly credible, it remains an assertion without further evidence such as a citation. A useful rule of thumb is that if one suspects those across the political spectrum may have a hard time agreeing, then it is an assertion.

Another tip is that if a seemingly factual statement such as "The economy has been booming recently" occurs alongside an assertion such as "we should take the opportunity to rethink the moral foundation of the country", the sentence should be treated as an assertion as the fact or testimony only has a limited scope that covers a portion of the sentence, while an assertion tag could cover its entirety. In addition, it is a common strategy to lead the audience to accept a viewpoint by presenting it alongside a more credible counterpart, even if the conjunctive component may not be logically relevant, in which case, it is much more problematic if the assertion is considered a fact than if a fact is questioned. Although the current annotation project is not designed to catch the difference between valid logic and insufficient reasoning, a sound category system could help future research in this area.

Last but not least, as we mentioned before, it is not within the annotator's responsibility to decide if something is true or not or if reliability of the source is a factor in the decision process. A useful question to ask is "what is the author doing here?" rather than "what is the author trying to do here?" or "is the author correct by saying this?" The aim of the current project is to be able to extract argumentation strategy more effectively and also to compare the distribution of different strategies across different media sources.