# Guidelines for Annotating Argumentation Structures in Legal Cases

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# 1 Objectives of the annotation

The goal of this study is to create a language resource for argument mining by manually annotating the structure of arguments in legal cases from the European Court of Human Rights (ECHR) corpus<sup>1</sup>. Since argument annotation is a complex task, these guidelines include the definitions of argument components, argumentation structures and argumentative relations before describing the steps of the annotation in detail.

The simplest form of an argument consists of one *claim* that is supported by at least one *premise* [7, 4]. The claim (or *conclusion*) is a controversial statement, expressed usually under the form of a proposition or assumption. The acceptance of the claim is subject to the presence of one or more premises (or *evidences*, or *facts*) that underpin the plausibility of the claim. A premise can therefore be seen as the justification of claim in the simplest form of arguments. More complex argument structures may include premises refuting the claim they are referring to.

We annotate two tasks simultaneously: argument component classification and argument component relation classification.

The task of argument component classification (ACC) aims to identify argumentative fragments of text and classify them as *claims*, *major claims*, or *premises*. These fragments are mostly intra-sentential but they may span multiple sentences as well.

Argument components are connected to each other by relations. As high-lighted above, premises may be linked to the claim they refer to by *support* or *attack* relations [5]. The task of argument component relation classification (ARC) aims to identify how the components relate to each other with a directed relation, and classify this relation as support or attack.

We can represent then the document's argumentative components as a directed graph that must be acyclic. The identification of the relations results in the identification of arguments, which are precisely a set of related argumentative components, i.e., an argumentative structure.

Following Mochales and Moens [3], we define an argument as a connected component of the graph with at least two argument components. To maintain the tree structure, we select the most important claim without an outward edge and classify it as the major claim, the root of the tree structure of the argument. All the remaining claims without an outward edge must then be labeled with a relation to the major claim.

The definition of the main concepts applied in the annotation is as follows:

**Argument**: in its simplest form, it includes one claim that is supported by at least one premise. It may consist of several statements (premises, claim). More precisely, each argument includes the following argument components.

<sup>1</sup>http://echr.coe.int/Pages/home.aspx?p=caselaw

**Argument Component**: each component has its own features, we singularly detail them below.

Claim: a controversial statement whose acceptance depends on premises that support or attack it. Claims are the central components of an argument and they either support or attack the major claim. We associate each claim with the actor that has issued it.

**Major Claim**: it is usually a general statement expressing the author's stance with respect to the topic under discussion.

**Premise**: they are the reasons given by the author for supporting or attacking the claims. They are not controversial but factual. Specifically for this corpus, We distinguish subclasses of Premises: Facts, Principles of Law and Case-law.

Relations: we consider two main kinds of relations: support and attack. Claims support or attack other claims or a major claim, premises may support or attack claims or other premises. Additionally, we have established two more minor relations, specific for this corpus: Duplicate (holding between claims or premises) and Citation (holding between premises, when one cites a reference Case-law).

In this document, the examples will be indented to the right and labeled with the format **claim**, *major-claim* and <u>premise</u>. In case two components of the same kind are right next to each other, they will be marked with [].

### 2 Annotation Procedure

As the documents reporting the cases submitted to the European Court of Human Rights are particularly long and involve multiple arguments, we recommend to follow these steps to obtain an optimal annotation:

- 1. Read the case and identify all the claims. The fact that a sentence is a claim is independent of the argument where it (may) be included.
- 2. Re-read the case and mark the major claims.
- 3. Mark the relations between the claims and the corresponding major claim. There may be "orphan" claims.
- 4. Mark the relevant premises that support or attack the identified claims.

# 3 Argument Components

Following Stab and Gurevych's work on argumentative essays [6], we use three types of labels: claim, major-claim and premise. Additionally, judgments involve several actors that develop different argumentations each. These actors

are mostly limited to the litigants (the applicant and the government) and the court itself (ECHR). We label the argument components with an attribute that specifies the source of the component, as in Ashley and Walker [1].

### 3.1 Annotation of Major Claims

Major-claims are the root node of the argumentation structure and represent a standpoint on the topic. They are opinionated statements.

Example 1 Relying on Article 6 of the Convention, the applicant complains that the labour court's dismissal of her claim for compensation against her former employer amounted to a violation of her right to be presumed innocent, in that the labour court found that she had broken her employer's trust by committing the offence of incitement. The applicant argues that the labour court's complete disregard of her acquittal in relation to the charge of incitement is incompatible with the requirements of Article 6 § 2 of the Convention. She further claims that the Bakırköy Labour Court based its decision on self-incriminating statements which she had given to the police in the absence of her lawyer.

In the above example, we select the most relevant claim of the argumentation to constitute the major claim, highlighted by boldface and italics. If a claim does not have any supporting or attacking component, then it cannot be a major claim (see Disconnected Components in Section 4.5).

Example 2 In their submissions, the Government maintained that the applicant's dismissal at the material time had been based on the self-incriminating statements she had given to the police. Although she had retracted her statements at a later date and denied having committed the alleged offence, the labour court had established that the acts of the applicant had breached her employer's trust and therefore justified her dismissal from her post. The Government also challenged the applicant's argument that the labour court had mentioned or had regard to her guilt under criminal law.

Argumentation may also involve chains of reasoning, where claims are used as premises for deriving further claims [2].

### 3.2 Annotation of Claims

Claims are statements that some of the parties involved assert to be true or false. Usually the verb is in present tense. We are annotating all claims, even if they are not related to a major claim in the argumentation of the judgment.

Only one of the four types of actors involved in the judgment (i.e., the *Applicant*, the *Court*, the *Government*, the *Third Parties*) can be actors of a claim. Third party actors are specifically named in the judgments as *Third Party Interveners*. Example 3 shows a special case of involved actor: "the labour court" is not one of the four types of actors we identified, therefore we cannot identify a claim issued by that actor. Instead, this is a premise of the type "fact", stating that the labour court had carried out some proceeding.

**Example 3** In their submissions, the Government maintained that the applicant's dismissal at the material time had been based on the self-incriminating statements she had given to the police. Although she had retracted her statements at a later date and denied having committed the alleged offence, the labour court had established that the acts of the applicant had breached her employer's trust and therefore justified her dismissal from her post.

Main verbs of communication, such as *conclude*, *allege*, *finds*, or *decide* have a higher chance of being the main verb of a claim.

Example 4 The applicant alleged that, despite her acquittal by a criminal court, the labour court's subsequent judgment, and in particular the pronouncement of her guilt therein, had breached her right to be presumed innocent within the meaning of Article 6 § 2 of the Convention.

Communication verbs may include the relation between the actor and the claim, that may be negative, as in the case of *challenge* or *complain* in the examples below. In this cases, the communication verb is added to the propositional and argumentative content of the claim. This has to be taken into account in modeling those claims.

Example 5 The Government also *challenged* the applicant's argument that the labour court had mentioned or had regard to her guilt under criminal law.

Example 6 The applicant also *complained* about the language used by Palma de Mallorca investigating judge no. 9...

Example 7 In the light of the foregoing factors, the Court is not satisfied that the investigations carried out in the present case were sufficiently thorough and effective to satisfy the aforementioned requirements of Article 3.

Modal verbs indicating unreality are also evidences that the sentence is a claim, even if the actor is not specified in the text.

Example 8 Any statement or reasoning by a civil court calling into question the applicant's established innocence would be incompatible with the requirements of Article 6 § 2.

### 3.3 Annotation of Premises

Premises are reasons advanced for or against some statement (i.e., claim or premise), and they provide facts or assertions that some actor puts forward as true, i.e., the conclusion is true. They are pieces of reasoning supporting or attacking a claim in the argument.

**Example 9** The Court notes that the parties do not dispute the fact that the termination of the applicant's employment was directly related to the events leading to the criminal proceedings.

**Example 10** Relying on Article 6 of the Convention, the applicant complains that the labour court's dismissal of her claim for compensation against her former employer amounted to a violation of her right to be presumed innocent, in that the labour court found that she had broken her employer's trust by committing the offence of incitement.

As a rule of thumb, if the actor of a statement is not explicitly stated, this is a strong indicator that the statement is a premise, not a claim. Claims tend to be clearly issued by someone, while premises are stand-alone truths. However, premises can also be explicitly stated by an actor, if they are indisputable facts or principles, as in the following examples:

Example 11 The Court observes that the criminal proceedings in the applicant's case, in which she was charged with incitement, ended in a full acquittal on 4 November 2005.

**Example 12** The Court notes that the parties do not dispute the fact that the termination of the applicant's employment was directly related to the events leading to the criminal proceedings.

A sentence is annotated as a premise only if it is linked to a relevant claim (a claim linked to a major claim). Premises that are not linked are left unannotated (unlike claims which must be annotated as such even if they are not linked to a major claim).

#### 3.3.1 Types of premises

Analyzing the judgments, we found three different types of premises, having specific features in the argumentation.

**Facts**: they are objective reporting of past facts (referred to as *data* in Toulmin's model [7]). Usually the verb is in past tense.

Example 13 The applicant claimed 3,500 Turkish liras (TRL – approximately 1,200 euros (EUR)) plus statutory interest accrued on that sum in respect of pecuniary damage.

Rights, principles and law: they are statements based on existing law, codes, or relying on specific jurisdictions.

**Example 14** However, in order to comply with the right guaranteed under Article 6 § 2 of the Convention, the national courts in the subsequent proceedings need to stay within the bounds of a civil forum and refrain from suggesting criminal characterization of the applicant's conduct

Case Law: they are mentions and references to previous cases.

**Example 15** See, mutatis mutandis, Frendo Randon and Others v. Malta, no. 2226/10, § 55, 22 November 2011.

### 3.3.2 Reported Speech

In some cases, the conclusions of a previous trial are reported and used as facts in the current argumentation. As we decided that only the actors involved in the judgment can emit claims, and the judgments of previous cases are taken as facts in present ones, reported speech is annotated as a premise of the argument in the present case, as shown in Example 16.

Example 16 In their submissions, the Government maintained that the applicant's dismissal at the material time had been based on the self-incriminating statements she had given to the police. Although she had retracted her statements at a later date and denied having committed the alleged offence], [the labour court had established that the acts of the applicant had breached her employer's trust and therefore justified her dismissal from her post

# 4 Argumentative Relations

We consider different types of relations between argument components, depending on the type of the components. More precisely, between claims and premises there are three possible relations: *support*, *attack*, and *duplicate*. Major claims cannot have outward relations [3, 6], but they can be supported or attacked by claims or premises. A major claim attacking or supporting another component would be equivalent to a inter argument relation, which is out of the scope of this annotation.

We add a special relation called *citation* between two premise to capture textual citations in the judgments, like the mention of a case. A summary of the argument component relations is shown in Table 1.

Table 1: Summary of argument component relations.

	to premise	to claim	to major claim			
from premise	attack, support, duplicate, citation	attack, support	attack, support			
from claim		attack, support, duplicate	attack, support			

#### 4.1 Attack

An attack relation between two argument components indicates that the source component is a refutation or a rebuttal of the target component. Let us consider the following example, where the claim "the applicant's dismissal at the material time had been based on the self-incriminating statements she had given to the police" is attacked by the premise "she had retracted her statements at a later date and denied having committed the alleged offence" whilst the other premise is supporting the claim.

Example 17 In their submissions, the Government maintained that the applicant's dismissal at the material time had been based on the self-incriminating statements she had given to the police. Although she had retracted her statements at a later date and denied having committed the alleged offence, the labour court had established that the acts of the applicant had breached her employer's trust and therefore justified her dismissal from her post.

### 4.2 Support

A support relation between two argument components indicates that the source component is a reason or a justification of the target component. Let us consider the following example, where the three premises highlighted in the text support the claim "the statements given by the applicant to the police without the assistance of a lawyer were relied on by the labour court".

Example 18 The Court notes in this context that it has already found that the use as evidence for a criminal conviction of statements given by the accused to the police without the assistance of a lawyer may amount to a violation of Article 6 § 1 of the Convention (see Salduz v. Turkey [GC], no. 36391/02, §§ 56-62, ECHR 2008). The Government have not commented on the applicant's claim that her statements to the police were used as evidence in the civil case. The Court further notes that the labour court in its judgment referred to the fact that the applicant's employer had relied on the fact that the applicant had confessed to inciting M.G. into committing the crime, and that the labour court explicitly stated that it had examined the entire criminal investigation file (see paragraph 14 above). Thus,

the facts of the case seem to indicate that **the statements given** by the applicant to the police without the assistance of a lawyer were relied on by the labour court, and the Court does not rule out that reliance by a court on such statements in civil proceedings may raise an issue under Article 6 § 1 of the Convention

## 4.3 Duplicate

Claims are often rephrased or explained more in detail during the argumentation of the judgment. In these cases, we cannot assess a precedence of one claim over the other in the argument, so we choose to label both and mark them as duplicates with an explicit relation, as it holds for the two claims identified in Example 19.

Example 19 Relying on Article 6 of the Convention, the applicant complains that the labour court's dismissal of her claim for compensation against her former employer amounted to a violation of her right to be presumed innocent, in that the labour court found that she had broken her employer's trust by committing the offence of incitement. The applicant argues that the labour court's complete disregard of her acquittal in relation to the charge of incitement is incompatible with the requirements of Article 6 § 2 of the Convention.

The same holds for premises.

#### 4.4 Citation

References to previous cases should be annotated as a different premise with respect to their conclusion, if this is present. The full span of the case citation should be labeled, as shown in Example 20, where "Allen v. the United Kingdom [GC], no. 25424/09, § 93, ECHR 2013 and the cases cited therein for a summary of the case-law" is the citation linked to the premise "the presumption of innocence imposes requirements in respect of, inter alia, the burden of proof, legal presumptions of fact and law, the privilege against self-incrimination, pretrial publicity and premature expressions, by the trial court or by other public officials, of a defendant's guilt".

Example 20 the presumption of innocence imposes requirements in respect of, inter alia, the burden of proof, legal presumptions of fact and law, the privilege against self-incrimination, pre-trial publicity and premature expressions, by the trial court or by other public officials, of a defendant's guilt (see Allen v. the United Kingdom [GC], no. 25424/09, § 93, ECHR 2013 and the cases cited therein for a summary of the case-law)

Example 21 ibid.,  $\S$  94

Law principles can be long and span over multiple sentences. They should be labeled as a single argument component, except in cases where the different aspects of the principle are used separately, as in the following argumentation:

**Example 22** However, in keeping with the need to ensure that the right guaranteed by Article 6 § 2 is practical and effective, the presumption of innocence also has another aspect. Its general aim, in this second aspect, is to protect individuals who have been acquitted of a criminal charge, or in respect of whom criminal proceedings have been discontinued, from being treated by public officials and authorities as though they are in fact guilty of the offence charged.

If more than one case is cited in the same sentence, they should be labeled separately. References to sections on the same case document should not be annotated. Only citations related to relevant premises should be annotated.

### 4.5 Disconnected components

Not all argumentative statements are included in an argument. If a statement does not support any claim, then we do not consider it as a premise. However, a statement that is a claim must be labeled, even if it is not related to any other claim, i.e., even if it does not play the role of premise for another claim in the document.

**Example 23** The Court firstly notes that the rules setting out the grant of leave for the use of one of the official languages of the Contracting Parties during proceedings are Rules 34  $\S$  3 and 36  $\S$  5(b) respectively. In the instant case, on 23 May 2014 the President of the Chamber gave leave to the applicant's representative to use Turkish in his correspondence.

Secondly, the Court considers that it cannot speculate as to what the outcome of the proceedings would have been had the Bakırköy Labour Court not disregarded the applicant's right to the presumption of innocence. It therefore considers that no award can be made in respect of the applicant's claim for pecuniary damages.

# 5 Syntactic guidelines

In this section, we report about some syntactic guidelines to be followed during the annotation.

# 5.1 Component boundaries

 Punctuation at the beginning or at the end of an argument component is not included in the annotated component. For example, full stops at the end of sentences are not included.

- Conjunctions at the beginning or end of an argument component are not included, neither if they are subordinating nor coordinating. Conjunctions that have negative semantics are not included either, but their semantics should be dealt with in a hedging module.
- Reporting verbs or expressions are not part of the component, as in "The Court notes that", "the fact that".

## 5.2 Multi-sentence components

We have observed that some components, like principles stated in laws, may cross sentence boundaries. We decide to respect this scenario with our annotation, but we do not allow components to span on different paragraphs. There are cases where the components have irrelevant text in the middle. The annotation can involve separated chunks of text only to avoid malformed phrases. However, breaking the component span should be avoided whenever is possible. It should not be used for co-reference resolution.

**Example 24** However, in keeping with the need to ensure that the right guaranteed by Article 6 § 2 is practical and effective, the presumption of innocence also has another aspect. Its general aim, in this second aspect, is to protect individuals who have been acquitted of a criminal charge, or in respect of whom criminal proceedings have been discontinued ...

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