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# News Categorization, Framing and Persuasion Techniques: Annotation Guidelines

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### Justification

- Appeal to Authority
- Appeal to Popularity
- Appeal to Values
- Appeal to Fear, Prejudice
- Flag waving

### Call

- Slogans
- Appeal to Time
- Conversation Killer

### Simplification

- Causal Oversimplification
- False Dilemma or No Choice
- Consequential Oversimplification

### Reputation

- Name calling or Labeling
- Casting Doubt
- Guilt by Association
- Appeal to Hypocrisy
- Questioning the Reputation

### Distraction

- Strawman
- Red herring
- Whataboutism

### Other

- Other

### Manipulative Wording

- Loaded language
- Repetition
- Exaggeration or Minimization
- Obfuscation, Vagueness, Confusion

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## **Abstract**

This document provides an overview of the task of annotating news articles and other web documents with: document category (genre), framing dimensions, and persuasion techniques, including an extensive description of the underlying taxonomies. It serves as guidelines for the annotators and curators, i.e., persons responsible for merging of annotations of individual annotators. It also provides a description of the underlying annotation platform (Inception), training material for annotators, and some lessons learned from a large-scale annotation campaign that involved annotating circa 1000 documents in 6 different languages and more than 30 people.

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# News Categorization, Framing and Persuasion Techniques: Annotation Guidelines

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# 1 Introduction

Text mining provides organizations the fundamental capability to extract insights and ultimately actionable knowledge captured in human writing. On-line media, which continuously report both facts and opinions in cross-lingual and cross-cultural settings, represent an excellent environment to validate novel algorithms. In this context, after the initial focus on factual information (who, what, where, when) it becomes essential to carry out in-depth comparisons of how topics of interest are embraced and presented across different countries and media.

The Text and Data Mining Unit of the European Commission Joint Research Centre is currently exploring an extension of the analytical functionalities of Europe Media Monitor, reference implementation of a large-scale multilingual media gathering and analysis engine <sup>1</sup> to provide automated detection of news category (genre), framing dimensions [3, 4], and persuasion techniques [8, 23, 28] detected in the body of a news article. Framing dimensions correspond to some specific aspects mentioned in the context of the main topic of an article [3], while persuasion techniques are tools and strategies used by individuals to influence others' opinions or to motivate them to undertake or support some action or adopt new behaviour(s). News category, framing dimensions and persuasion techniques cover three complementary aspects of what makes a text persuasive. The availability of human-annotated news article corpora that constitute the input for training respective machine learning-based models is a prerequisite for developing AI-based solutions to implement these functionalities.

This document provides an overview of the task of annotating news articles and other web documents with: document category (genre), framing dimensions, and persuasion techniques. It serves as guidelines for the annotators and curators, i.e., those responsible for merging of annotations of individual annotators. It also provides a description of the underlying annotation platform (Inception) and some training material for annotators.

The remainder of this manuscript is structured as follows. First, Section 2 gives an overview of related work. Section 3 provides a high-level overview of the annotation task at hand. Next, Section 4 introduces the task of assigning documents a news category. Subsequently, Section 5 presents the framing dimensions accompanied with some examples. Section 6 then introduces persuasion techniques. Section 7 briefly presents an online tool for annotator training for the persuasion technique annotation. Next, Section 8 presents the web-based tool used to do the annotations. Finally, Section 9 provides a summary of some lessons learned from using these guidelines and carrying out a large-scale 'multilingual' annotation campaign, involving more than 30 people.

## 2 Related Work

### 2.1 News Genre Categorization

[27] developed a corpus with document-level annotation labeled with four classes: *trusted*, *satire*, *hoax*, and *propaganda*. It was developed using distant supervision,

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<sup>1</sup><https://emm.newsbrief.eu/>



i.e., all articles from a given news outlet share the label of that outlet. They studied the language and the style of these four categories and made some interesting observations based on the LIWC lexicon. [19] also studied the relationship between fake news, real news, and satire with focus on a style. They found that fake news is more similar to satire than to real news. [15] developed a dataset of fake news and satire stories and analyzed and compared their thematic content. Satire is also one of the categories in the NELA-GT-2018 dataset [26], as well as its extended version NELA-GT-2019 [16].

Our inventory is a bit different from above: we aim to distinguish between objective news reporting, opinion piece, and satire.

## 2.2 Framing Detection

Framing is a strategic device and a central concept in political communication, for representing different salient aspects and perspectives for the purpose of conveying the latent meaning about an issue [14]. It is important for news media as the same topics can be discussed from different perspectives, which can influence our understanding, beliefs, and attitudes regarding what is happening in our society. There has been recent work on automatically identifying media frames, which includes developing coding schemes and datasets such as the Media Frames Corpus [4], developing systems to automatically detect media frames [22, 29], large scale automatic analysis of New York Times Articles [21], and a semi-supervised approach to detecting frames in online news sources [5].

Here, we adopt the frame inventory of the Media Frames Corpus.

## 2.3 Persuasion Techniques Detection

Work on persuasion overlaps to a large extent with work on propaganda, as there is a lot of crossover between the two (even though the goals and the techniques differ). Thus, below we will discuss work on both.

Early work on propaganda detection focused on document-level analysis. [27] predicted four classes (*trusted*, *satire*, *hoax*, and *propaganda*), labeled using distant supervision: all articles from a given news outlet were assigned the label of that outlet. [2] developed a corpus with two labels (i.e., *propaganda* vs. *non-propaganda*) and further investigated writing style and readability level. Their findings confirmed that using distant supervision, in conjunction with rich representations, might encourage the model to predict the source of the article, rather than to discriminate propaganda from non-propaganda.

An alternative line of research focused on detecting the use of specific propaganda techniques in text. For example, [17, 18] developed a corpus with 1.3k arguments annotated with five fallacies that directly relate to propaganda techniques, including *ad hominem*, *red herring*, and *irrelevant authority*.

A more fine-grained propaganda analysis was done by [11], who developed a corpus of news articles annotated with the spans of use of eighteen propaganda techniques. They asked to predict the spans of use of propaganda, as well as the specific technique being used, and they further tackled a sentence-level propaganda detection task. They proposed a multi-granular gated deep neural network that captures signals from the sentence-level to improve the performance of the fragment-level classifier and vice

versa. Subsequently, the Prta system was released [10], and improved models were proposed addressing the limitations of transformers [6], or looking into interpretable propaganda detection [28]. Finally, there was work looking into detecting the use of propaganda techniques in memes [12], into studying the relationship between propaganda and coordination [20], or studying COVID-19 related propaganda in social media [24, 25]. See also [9] a recent survey on computational propaganda detection.

There were several shared tasks on detecting the use of propaganda techniques in text. *SemEval-2020 task 11 on Detection of Persuasion Techniques in News Articles* [8] focused on news articles, and asked (i) to detect the spans where propaganda techniques are used, as well as (ii) to predict which propaganda technique (from an inventory of 14 techniques) is used in a given text span. Another closely related shared task is the *NLP4IF-2019 task on Fine-Grained Propaganda Detection*, which asked to detect the spans of use in news articles of each of 18 propaganda techniques. The *SemEval-2021 task 6 on Detection of Persuasion Techniques in Texts and Images* focused on the use of 22 propaganda techniques in memes [13]. Finally, a WANLP'2022 shared task focused on detecting 20 propaganda techniques in Arabic tweets [1].

Our work is inspired by the above work on propaganda detection, but we extended and redesigned the annotation schema, and we focused on a multi-lingual setup.

## 3 Annotation Task Overview

### 3.1 Labels

The task consists of annotating for a given news article: (a) news category, (b) framing dimension(s), and (c) persuasion techniques contained in the text. The aforementioned tasks are summarized below.

- **News Categorisation:** determine whether the article is:
  - an opinion piece,
  - aims at objective news reporting, or
  - is a satire piece
- **Frame Detection:** determine one or more frames used in the article out of a pool of [15 domain-independent framing dimensions](#) described in [3, 4]. A frame is the perspective under which an issue or a piece of news is presented (e.g., economy, morality, safety, etc.).
- **Persuasion Techniques Detection:** identify any of the [23 persuasion techniques](#), mainly derived from the taxonomy presented in [8], together with the text spans in the article in which they occur.

While news categorization and framing dimension(s) determination is a document-level annotation task, persuasion technique detection is a character-level annotation task.

## 3.2 Data Selection

The topics of the news articles revolve around main hot topics deemed as relevant in the EU context, and the pool of topics is extended dynamically based on the interests that emerge. Data sources were selected in such a way as to (a) cover both mainstream media and media outlets considered as spreading disinformation, and (b) offer a balance in terms of political bias/orientation in order to get a majority of highly polarised content rich in persuasion techniques.

## 3.3 Annotation Procedure

The annotation process is organized in order to get the highest possible annotation quality, so several steps were added over usual annotations tasks. The entire process is the following:

- Annotators read the guidelines and annotate a trial article in English containing exactly three examples of each of the techniques. The difficulties they faced and their errors are discussed. When they annotate their first actual document in their target language, a meeting is organised with an experienced annotator speaking the language to discuss further questions and resolve any doubts the candidate annotators have.
- Each document is annotated by two annotators. There is no fixed pair of annotators. In particular, for languages for which there are more than two annotators the documents are annotated by different combinations of annotator pairs, from the language-specific pool of annotators.
- On a weekly basis:
  - a report is sent to the annotators, comparing their annotations with those of the other annotators for the same documents (highlighting potentially conflicting annotations), so that they reach a better common understanding of the task at hand;
  - Inter-annotator agreement (IAA) [7] is computed for all pairs of annotators, giving an idea of which language deserves more attention and to identify an expert annotator to later take a curator role in this language<sup>2</sup>;
  - a meeting is held with annotators to align and to resolve general-in-nature issues, to discuss specific annotation cases, to resolve problems, and to share other experience. Depending on the need, language-specific meetings are also regularly held.
- Once both annotations for one document are done, a consolidator (curator), who is a more experienced annotator, together with the annotators, discusses, merges annotations and resolves the identified conflicts, all of which results in what is considered ground truth.
- Once all the documents for a language are annotated, we perform the following additional steps:

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<sup>2</sup>Making an assumption that annotators, who have higher IAA with other annotators are better suited to take the role of a curator.

- All the annotations are placed in a single spreadsheet, which contains additionally the context of the annotation. For the most 'difficult' labels<sup>3</sup>, a curator goes through them and checks them all a second time, and fixes (in consultation with annotators) any issues that would not have been noticed during the first phase of the curation process;
- All text fragments that have been annotated, and the corresponding labels, are sorted alphabetically, and the curator explores whether similar sentences were tagged with similar labels since, intuitively, identical or near-duplicate texts should be assigned the same label, unless it is evident from the context that the distinct labels assigned are correct. This step focuses on checking consistency of the annotations.
- During the entire curation phase regular meetings are held between the curators responsible for different languages to converge and to align to a common approach in the context of potentially identified discrepancies in annotations across languages.

## 4 News Categorization

There are five possible news categories, each described below. It is important to emphasize that **ONLY ONE NEWS CATEGORY** should be assigned to a given news article.

### 4.1 Opinion

An article is considered as an opinion piece if it expresses what someone thinks or feels about a topic. It is a person's attempt to persuade readers to adopt a particular position on an event or to change another's thinking, feeling, or actions. Opinions do not necessarily rest in fact or knowledge, though the most respected opinions generally do.

Examples:

- *'The government of Alberta has re-introduced its Education Act, which addresses the issue of student bullying in schools. The bill affirms that students are entitled to learning environments that are welcoming, caring, respectful and safe. The government is to be commended both for its process in engaging the community, and for the resulting new provisions.'*

### 4.2 Reporting

An article aims at objective news reporting when it involves discovering all relevant facts, selecting and presenting the important facts and weaving a comprehensive story. The generic structure of reporting news acts to naturalise and to obscure the operation of underlying ideological positions.

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<sup>3</sup>For instance, in the context of persuasion techniques, the ones for which the lowest IAA was observed between annotators, and techniques which have more complex structure.

Examples:

- *'Costa Rica's Juan Santamaria International Airport reopened on Thursday hours after a Boeing 757-200 cargo aircraft operated by DHL made an emergency landing and skidded off the runway, separating its tail, aviation authorities said.'*
- *'Shanghai —home to China's leading financial centre and some of its largest sea and airports —has been under lockdown for 12 days, and there's no sign of it ending.'*

### 4.3 Satire

A satirical piece is a factually incorrect article, with the intent not to deceive, but rather to call out, to ridicule, or to expose behaviour that is shameful, corrupt, or otherwise 'bad'. It deliberately exposes real-world individuals, organisations, and events to ridicule. Satirical pieces use a variety of rhetorical devices, such as hyperbole, absurdity, and obscenity, in order to shock or to unease readers and tend to mimic true articles, incorporating irony in an attempt to provide humorous insights.

Examples:

- *'Bank Of England Governor Mervyn King is a Queen, Says Fed Chairman Ben Bernanke. During last night's appearance on the American David Letterman Show, Fed Chairman Ben Bernanke let slip that Bank of England (BOE) Governor, Mervyn King, enjoys wearing women's clothing.'*
- *'According to tax filings obtained from the Clinton Foundation, former Secretary of State Hillary Clinton received a 225,000\$ speaking fee Wednesday night for telling her grandson a bedtime story.'*
- *'Blinking repeatedly to ensure that what he was seeing outside was actually real, Amazon worker Tony Ureña emerged from his holiday overtime shift Monday to find 3,000 years had passed in the outside world.'*

### 4.4 Ignore

The article cannot be categorized since it presents some issues: i.e., it is written in another language, it is code (e.g., html), it is just a sequence of characters that do not make any sense, etc.

### 4.5 Other

The article is not an opinion piece, it does not report objective news, and it is also not a piece of satire. Articles labeled as Other are subject to investigation by the curator, who decides what to do with them.

## 4.6 Hints When Annotating the News Category

Here are some useful hints for annotating the News category.

- **Opinion versus Reporting:** in the case of news articles that contain citations and opinions of others (i.e., not of the author) the decision whether to label such an article as `Opinion` or `Reporting` should in principle depend on what the reader thinks the intent of the author of the article was. In order to make this decision simpler, the following rules should be applied:
  - articles that contain even a single sentence (could even be the title) that is an opinion of the author or suggests that the author has some opinion on the specific matter should be labelled as `Opinion`,
  - articles containing a speech or an interview with a **single** politician or expert, who provides her/his opinions should be labelled as `Opinion`,
  - articles that ‘report’ what a **single** politician or expert said in an interview, conference, debate, etc. should be labelled as `Opinion` as well,
  - articles that provide a comprehensive overview (spectrum) of what many different politicians and experts said on a specific matter (e.g., in a debate), including their opinions, and without any opinion of the author, should be labelled as `Reporting`,
  - articles that provide a comprehensive overview (spectrum) of what many different politicians and experts said on a specific matter (e.g., in a debate), including their opinions, and with some opinion or analysis of the author (the author might try to tell a story), should be labelled as `Opinion` ,
  - commentaries and analysis articles should be labelled as `Opinion`.

The borders between opinion and reporting might be sometimes blurred, there might not be a perfect answer, in such cases the annotators are invited to use their best judgement.

- A news article which contains some small text fragment, e.g., a sentence that appears satirical **is not supposed to be annotated as** `Satire`.
- It is important to read thoroughly the entire article since the fragment that triggers it to be an opinion might be just one single sentence, often appearing at the end (see one of the examples above).

## 5 Framing Dimensions

In the context of the task at hand, we refer to the definition of framing introduced in [4]: "To frame is to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described."

Framing dimension annotation is in principle done at the document level, however, in order to store the reference to the text fragment which is considered evidence of using a specific framing, the annotator should select the respective text fragment and annotate it with the framing dimension label. It is important to emphasize at this stage that it is SUFFICIENT TO ANNOTATE ONLY ONE text fragment PER FRAMING DIMENSION TYPE. It is also irrelevant which text fragment (there could be many) that constitutes evidence of using specific framing is chosen for annotation.

An example of a text with annotation of three framing dimensions is shown below.

- Economic, Policy prescription, Cultural identity

*Critics of illegal immigration can make many cogent arguments to support the position that the U.S. Congress and the Colorado legislature must develop effective and well-enforced immigration policies that will restrict the number of people who migrate here legally and illegally. It's true that all forms of immigration exert influence over our economic and cultural make-up. In some ways, immigration improves our economy by adding laborers, taxpayers and consumers, and in other ways immigration detracts from our economy by increasing the number of students, health care recipients and other beneficiaries of public services. Some economists say that immigrants, legal and illegal, produce a net economic gain, while others say that they create a net loss. There are rational arguments to support both sides of this debate, and it's useful and educational to hear the varying positions*

The remainder of this section provides the complete list of framing dimensions, which are accompanied by examples. The text fragments highlighted in yellow are evidence of using certain framing.

### 5.1 Economic

This type identifies parts of the articles referring to costs, benefits, or other financial implications.

Examples:

- MAIN TOPIC: Migration

*"Critics of illegal immigration can make many cogent arguments to support the position that the U.S. Congress and the Colorado legislature must develop effective and well-enforced immigration policies that will restrict the number of people who migrate here legally and illegally. It's true that all forms of immigration exert influence over our economic and cultural make-up. In some ways, immigration improves our economy by adding labourers, taxpayers and consumers, and in*

*other ways immigration detracts from our economy by increasing the number of students, health care recipients and other beneficiaries of public services. Some economists say that immigrants, legal and illegal, produce a net economic gain, while others say that they create a net loss. There are rational arguments to support both sides of this debate, and it's useful and educational to hear the varying positions"*

- MAIN TOPIC: Head of Japan's Central Bank

*"The head of Japan's central bank is a very patient individual. When Haruhiko Kuroda became governor of the Bank of Japan (BOJ) nine years ago, he pledged that he would rid the world's third-largest economy of the deflationary pressures that had helped keep growth slow ever since 1990. His goal was to pump in enough money to create a 2 percent inflation rate that would raise wages and spending power. With commodity price inflation raising alarms globally, he finally looks set to achieve his goal. While the latest data is highly volatile, economists predict that Japan will finally start to see a 2 percent inflation rate—and possibly more—in upcoming months. So far the figures remain tame by global standards. While the U.S. Consumer Price Index rose by 8.5 percent in March compared to a year earlier, the highest rate of increase since 1981, Japan's index was up just 1.2 percent. But that includes a 52.7 percent fall in mobile phone charges after a government crackdown on the three-company cartel that virtually controls the sector. Other figures were eye-popping by Japan standards. Energy costs jumped 20.8 percent, the steepest rise since 1981, while cooking oil increased 34.7 percent. Another measure of inflation at the wholesale level, the Corporate Goods Price Index jumped 9.5 percent year-on-year in March, due in part to the dire situation in Ukraine."*

## 5.2 Capacity and Resources

This type identifies parts of the articles referring to the availability of physical, human, or financial resources, and the capacity of current systems.

Examples:

- MAIN TOPIC: Lab-grown meat and insects

*"Dining on the likes of lab-grown meat or ground-up insects could lead to big savings in carbon emissions and water, as well as freeing up land for nature. That's the finding of a study calculating the environmental benefits of "greener" foods hitting our plates. Scientists say pressures on the planet could fall by more than 80% with such foods, compared with the typical European diet. But it's not yet clear if consumers will want to shift their eating habits. A host of non-conventional foods are being developed with the aim of providing food rich in protein and other nutrients, while being gentle on the planet by using less water and land. Scientists in Finland studied the nutritional profile of some of these products and looked at three measures of environmental pressure: the use of water, land and potential carbon emissions."*



### 5.3 Morality

This type identifies parts of the articles referring to religious or ethical implications.

Examples:

- MAIN TOPIC: relationship between India and Pakistan

*"In a development, a group of eminent pro-democracy intellectuals, politicians, journalists and activists have urged the new government in Pakistan to work towards better ties with India and other neighbouring countries. The group asked the Shehbaz Sharif regime to play a constructive role in defusing ethnic and religious conflicts, and strive for improved relations with the border nations. The group further noted that international relations were important to rebuild the country's economy and resolve other issues like terrorism. The groups of eminent pro-democracy intellectuals, politicians, journalists and activists were speaking at a virtual conference organised by the South Asians against Terrorism and for Human Rights (SAATH) when they urged the new government to take action on the front. The group noted that the new regime formed after Imran Khan's exit as the PM should immediately engage with Baloch nationalists too. It said that the Sharif regime must find an "amicable" solution to violence in restive Baluchistan province."*

### 5.4 Fairness and Equality

This type identifies parts of the articles referring to the balance or distribution of rights, responsibilities, and resources.

Examples:

- MAIN TOPIC: Covid-19 consequences

*"The echoes of the global pandemic are likely to ring on for years longer because governments have failed to tackle it together, finds a major new analysis that raises troubling questions for the climate crisis. A report just released by the International Science Council –a group made up of 200 bodies and led by New Zealand's former chief scientist, Professor Sir Peter Gluckman –explored three possible pandemic scenarios over the next five years. In the most likely of those, by 2027, Covid-19 will have become an endemic disease worldwide –and still be driving seasonal surges requiring updated vaccines and boosters. Most of the planet's unvaccinated population would still be concentrated in low-income states, where health systems could risk collapse and food security will have worsened. With recovery efforts spread unevenly between countries –and high-income countries' high vaccine uptake and access to antivirals sparing them from further major waves –the report painted a grim picture of exacerbated inequality across every part of society. In a yet more pessimistic 2027 scenario, less than 70 per cent of the world's population would be vaccinated –and hard measures like regional lockdowns and work-from-home policies would still be a reality in some countries. The world still faced damaging social upheaval in the form of long-term school closure and unemployment, while growing nationalism would hinder efforts to vaccinate*

*the world and give rise to further conflict. Even amid a worsening climate crisis, many countries would move to reverse environmental reforms in attempts to overcome Covid-19's economic impact. Under the third and most optimistic scenario, global collaboration would have rendered Covid-19 a more manageable disease, and no longer an "acute priority". Vaccines were spread more equitably across the globe –covering more than 80 per cent of the population –while schools were no longer disrupted and restrictive health measures weren't needed."*

## **5.5 Legality, Constitutionality and Jurisprudence**

This type identifies parts of the articles referring to rights, freedoms, and authority of individuals, corporations, and government.

Examples:

- MAIN TOPIC: US sanctions on Cuba

*"US officials have announced plans to ease tough sanctions imposed on Cuba by former President Donald Trump. Under new measures approved by the Biden administration, restrictions on family remittances and travel to the island will be eased. The processing of US visas for Cubans will also be speeded up. State Department spokesman Ned Price said the move would allow Cuban citizens to pursue a life free from "government oppression". The loosening of sanctions will see a cap on family remittances -funds sent by migrants in the US to family members in Cuba -removed. Previously migrants were prevented from sending more than \$1,000 every three months. Donations to non-family members will also be permitted under the new plans. But US officials emphasised that they will seek to ensure such payments don't reach "those who perpetrate human rights abuses" by using civilian "electronic payment processors". They also said that no bodies will be removed from the Cuba Restricted List, a State Department register of companies linked to the communist government in Havana with whom US citizens are barred from doing business."*

## **5.6 Policy Prescription and Evaluation**

This type identifies parts of the articles referring to discussion of specific policies aimed at addressing problems.

Examples:

- MAIN TOPIC: illegal migration

*"Critics of illegal immigration can make many cogent arguments to support the position that the U.S. Congress and the Colorado legislature must develop effective and well-enforced immigration policies that will restrict the number of people who migrate here legally and illegally. It's true that all forms of immigration exert influence over our economic and cultural make-up. In some ways, immigration improves our economy by adding labourers, taxpayers and consumers, and in other ways immigration detracts from our economy by increasing the number of*

students, health care recipients and other beneficiaries of public services. Some economists say that immigrants, legal and illegal, produce a net economic gain, while others say that they create a net loss. There are rational arguments to support both sides of this debate, and it's useful and educational to hear the varying positions."

- MAIN TOPIC: Alaska Oil resources

"The Biden administration on Monday overturned a controversial Trump-era policy that would have opened new swathes of Arctic Alaska to oil development. The Bureau of Land Management, part of the Department of Interior, resurrected **Obama-era management policies** in the National Petroleum Reserve in Alaska, a 23-million-acre (9.3 million hectare) area on the western side of Alaska's North Slope. Alaska's oil production has been declining for decades and reached a 45-year low last year. Those reinstated policies, contained in a plan presented in 2013, allow oil leasing in about half of the reserve while boosting protections for areas considered important to the Arctic ecosystem and to indigenous residents."

## 5.7 Crime and Punishment

This type identifies parts of the articles referring to the effectiveness and the implications of laws and their enforcement.

Examples:

- MAIN TOPIC: Innovation in the Indian bio-pharmaceutical sector

"In November 2021, Prime Minister Mr. Narendra Modi inaugurated the first Global Innovation Summit of the pharmaceutical sector. The summit will have 12 sessions, wherein national and international speakers will deliberate on a range of subjects, including regulatory environment, funding for innovation, industry-academia collaboration, and innovation infrastructure. To achieve self-reliance and minimise the country's import dependency for essential bulk drugs, the Department of Pharmaceuticals had initiated the PLI Scheme to promote domestic manufacturing by setting up greenfield plants with minimum domestic value addition in four separate 'Target Segments' with a cumulative outlay of Rs. 6,940 crore (USD\$ 951.27 million) from FY21 to FY30. In June 2021, Finance Minister Ms. Nirmala Sitharaman announced an additional outlay of Rs. 197,000 crore (USD 26,578.3 million) that will be utilised over five years for the Production Linked Incentive (PLI) Scheme in 13 key sectors such as domestic production of active pharmaceutical ingredients (APIs), drug intermediaries and key starting materials. On March 29, Union Health and Chemical and Fertilisers Minister Mansukh Mandaviya announced that of the 53 drug raw materials for which India was dependent on imports, 35 are now being manufactured in India under the PLI Scheme. Strong IP laws is the panacea. The constant increase in the size of the Indian pharmaceutical market due to changing lifestyle and high demand for quality healthcare makes this sector as one of the promising contributors to the Indian economy. Strong IPRs will induce companies to introduce more advanced products, spur innovation globally and foster more rapid economic growth. The regulatory policies need to be improved, especially for patents and price control, to boost the

*growth and project India as the destination for the new generation pharmaceutical market. With strong IP laws, the chances of counterfeit drugs reaching the market are considerably lower as these laws provide greater means of tracking the supply chain through trademarks, trade secrets, and licensing agreements. This allows greater quality control and helps manufacturers retain public confidence in their products. Also, firms marketing patented products earn high margins that enables them to plough back more resources into R&D and come up with more useful discoveries."*

## **5.8 Security and Defence**

This type identifies parts of the articles referring to threats to welfare of the individual, community, or nation.

Examples:

- MAIN TOPIC: Finland and Sweden request to enter NATO

*"At a news conference on Monday, Mr Erdogan said Turkey opposed the Finnish and the Swedish bids to join Nato, describing Sweden as a "hatchery" for terrorist organisations."Neither of these countries have a clear, open attitude towards terrorist organisation. How can we trust them?" the Turkish president said. Turkey accuses the two Nordic nations of harbouring members of the Kurdistan Workers' Party (PKK), a group it views as a terrorist organisation, and followers of Fethullah Gulen, who Ankara accuses of orchestrating a 2016 coup attempt. All member states must agree that a new country can join Nato, therefore Sweden and Finland require Turkey's support in their bid to join the military alliance. Mr Erdogan said Swedish and Finnish delegations should not bother going to Ankara, Turkey's capital, to convince it to approve their Nato bid. His government has also pledged to block applications from countries that have imposed sanctions on it. In 2019, both Nordic nations slapped an arms embargo on Ankara after its incursion into Syria. Speaking in parliament in Helsinki on Monday, Finnish Foreign Minister Pekka Haavisto said he was surprised by Turkey's stance, but added that his government was not interested in "bargaining" with Mr Erdogan. Finland formally announced its bid to join Nato last week. It was joined by neighbour Sweden on Saturday in a move that will end the Scandinavian country's centuries-long military non-alignment."Nato will strengthen Sweden, Sweden will strengthen Nato," Prime Minister Magdalena Andersson said at a briefing on Monday. She said Europe was now living in a dangerous new reality, referring to Russia's invasion of Ukraine."We are leaving one era behind us and entering a new one," Ms Andersson told lawmakers during a debate in Stockholm, also on Monday."*

- MAIN TOPIC: Smart farm machinery

*"Smart technology is increasingly being used to make farms more efficient and productive -for example, until now the labour-intensive harvesting of delicate food crops such as asparagus has been beyond the reach of machines. The latest generation of agricultural robots use artificial intelligence, minimising human involvement. They may help to plug a labour shortage or increase yield, but fear of the*

*inherent security risk is growing, adding to concern over food-supply chains already threatened by the war in Ukraine and Covid. Chris Chavasse, the co-founder of Muddy Machines, which is trialling an autonomous asparagus-harvesting robot called Sprout, said: "There is a real risk that people anywhere in the world could try and take control of these machines," he said. "To get them to do whatever those people want, or just prevent them from operating."He said potentially someone could drive Sprout into a hedge or a ditch, or prevent it from working at all, so they are working with security researchers to address any vulnerabilities.Asparagus farming is unlikely to be a prime target, but Mr Chavasse believes malicious hackers could threaten "mission critical"agricultural infrastructure."*

## **5.9 Health and Safety**

This type identifies parts of the articles referring to health care, sanitation, and public safety.

Examples:

- MAIN TOPIC: Lab-grown meat and insects

*"The research, published in Nature Food, examined new foods that are expected to become a bigger part of our diets in future years, many of which rely on high-tech methods to "grow" animal and plant cells in bioreactors.The novel foods studied -some of which are still on the drawing board -were:Ground-up flies and crickets;Egg white from lab-grown chicken cells; A type of seaweed called kelp;Protein powders made from mushrooms or microbes; Edible algae;Milk, meat and berries grown from cells.Dr Asaf Tzachor of the University of Cambridge, who was not part of the research team, said while these are "promising" findings, the unwillingness of consumers to shift their diets might "postpone, or indeed prevent, this much-needed transition".Numerous studies have shown that moving towards a plant-based diet has benefits for both health and the planet. A recent report by the Intergovernmental Panel on Climate Change recommended a switch to balanced diets that are rich in plants like grains and vegetables, with a moderate intake of sustainably produced meat and dairy."*

## **5.10 Quality of Life**

This type identifies parts of the articles referring to threats and opportunities for the individual's wealth, happiness, and well-being.

Examples:

- MAIN TOPIC: Climate crisis

*"The climate crisis-induced disasters are among the most relevant dangers to human survival. Children, in particular, are at the receiving end. Today, an estimated 2.2 billion children worldwide are growing up facing the impacts of the climate crisis, even though they have the right to healthy and nutritious food, good physical, mental and social health, and access to knowledge.The climate crisis directly*

*threatens these basic rights of children. India is the third most disaster-prone country globally, next only to United States (US) and China, with children comprising 40% of its population. Any disasters impact the most vulnerable people and their children disproportionately.”*

### **5.11 Cultural Identity**

This type identifies parts of the articles referring to traditions, customs, or values of a social group in relation to a policy issue.

Examples:

- MAIN TOPIC: illegal immigration

*“Critics of illegal immigration can make many cogent arguments to support the position that the U.S. Congress and the Colorado legislature must develop effective and well-enforced immigration policies that will restrict the number of people who migrate here legally and illegally. It’s true that all forms of immigration exert influence over our economic and cultural make-up. In some ways, immigration improves our economy by adding labourers, taxpayers and consumers, and in other ways immigration detracts from our economy by increasing the number of students, health care recipients and other beneficiaries of public services. Some economists say that immigrants, legal and illegal, produce a net economic gain, while others say that they create a net loss. There are rational arguments to support both sides of this debate, and it’s useful and educational to hear the varying positions.”*

### **5.12 Public Opinion**

This type identifies parts of the articles referring to attitudes and opinions of the general public, including polling and demographics.

Examples:

- MAIN TOPIC: Deployment of renewables in France

*“Electric mobility is on the rise in France, but it is not growing as strongly as in other EU countries, such as the Netherlands and Norway, said Berghmans. This is partly due to delays in deploying charging infrastructure, as well as to insufficient incentives for the uptake of electric vehicles, he said. French citizens rely heavily on cars –with 75% using a car for their daily commute –and investments in cycling and public transport are lagging, he added. A carbon tax on fuel has been frozen since 2018, when a proposed hike triggered widespread protests and gave birth to the “gilets jaunes” movement. “The shadow of yellow vests still looms large. It’s likely Macron’s new government will remain extremely cautious about reintegrating the carbon tax to its arsenal of measures,” Lola Vallejo, climate programme director at Iddri, told Climate Home News. The country’s citizens’ assembly has identified mandatory minimum energy performance standards for buildings as a key measure to force deep renovation of buildings but this measure has been watered down by the government, said Makaroff. “Renovation efforts are still timid*

*considering the triple menace of climate change, the cost of living crisis, and the Russia-Ukraine war,” Vallejo said. “Public support for [this] is still insufficient and poorly targeted to the deep energy renovations that are needed to achieve climate targets,” said Berghmans. The government should offer more solutions and alternatives to poorer households, whose financial balances are directly impacted by rising fuel prices, he said.”*

### **5.13 Political**

This type identifies parts of the articles referring to considerations related to politics and politicians, including lobbying, elections, and attempts to sway voters.

Examples:

- MAIN TOPIC: Australian climate policies

*“Still reliant on coal for most of its electricity, it is one of the dirtiest countries per capita -making up just over 1% of global emissions, but only 0.3% of the world’s population. It’s a massive global supplier of fossil fuels, and once that is factored in, it accounts for 3.6% of the world’s emissions. But it’s also one of the nations most at risk from climate change. In recent years, Australia has suffered severe drought, historic bushfires, successive years of record-breaking floods, and six mass bleaching events on the Great Barrier Reef. And it’s racing towards a future full of similar disasters, the latest UN Intergovernmental Panel on Climate Change (IPCC) report warns. The current government has angered allies with its short-term emissions reductions target -which is half what the IPCC says is needed if the world has any chance of limiting warming to 1.5C. But Australia is still wedded to fossil fuels and climate policy has famously played a role in toppling three prime ministers in a decade. Though most voters want tougher climate action, some coal towns lie in swing constituencies that are key to winning elections.”*

### **5.14 External Regulation and Reputation**

This type identifies parts of the articles referring to international reputation or foreign policy.

- MAIN TOPIC: Covid-19 cases in North Korea

*“It seems North Korea is where much of the world was back in early 2020. Covid is spreading rapidly through the population which is not vaccinated, has no built-up immunity, and has limited options to treat the virus. The difference of course is that North Korea has had time to prepare for this and has seemingly done little to do so. Instead, it has focused on its strategy of preventing the virus from entering the country. It has turned down vaccines in the past saying it didn’t need them. Now it does need them, but it might be too late. Health experts say the urgent priority is getting antiviral drugs into the country to treat people who are suffering. But in order for this to happen, North Korea needs to accept help, and it is yet to ask for any. South Korea’s offers of vaccines and aid have gone unanswered.*

*It is extremely unlikely the North would ever accept help from South Korea. It will be far more palatable if the offer comes from an international organisation such as the United Nations, even if that means South Korea's supplies need to be redirected and packaged up in this way. It is a risk for North Korea to accept aid and medical care because it means they would have to let people into the country to distribute and administer it. But the fact that it is reporting its daily deaths and case numbers is seen as an indication that it needs and wants help."*

### **5.15 Other**

This type identifies parts of the articles referring to any coherent group of frames not covered by the above categories.

### **5.16 Hints when Annotating the Framing Dimensions**

Here are some useful hints for annotating Framing dimensions.

- the main topic of an article can be considered as a framing dimension per se, i.e., it should be annotated,
- do not invest much time in deciding about the borders of the text span to annotate since the text span serves only as a link to the part of the text, where the specific framing is used since this is only useful for the curators to check the reasoning of the annotator when making their decision.



## 6 Persuasion Techniques

Persuasive text is characterized by a specific use of language in order to influence readers. We distinguish the following high-level approaches:

- **Attack on reputation:** the argument does not address the topic itself, but targets the participant (personality, experience, deeds, etc.) in order to question and/or to undermine his credibility. The object of the argumentation can also refer to a group of individuals, an organization, an object, or an activity,
- **Justification:** the argument is made of two parts, a statement and an explanation or appeal, where the latter is used to justify and/or to support the statement,
- **Simplification:** the argument excessively simplifies a problem, usually regarding the cause, the consequence, or the existence of choices,
- **Distraction:** the argument takes focus away from the main topic or argument to distract the reader,
- **Call:** the text is not an argument but an encouragement to act or to think in a particular way,
- **Manipulative wording:** the text is not an argument per se, but uses specific language, which contains words or phrases that are either non-neutral, confusing, exaggerating, loaded, etc., in order to impact the reader emotionally.

These are further subdivided in 23 specific techniques depending on a fine grained characterization of the underlying mechanism. Figure 1 and 2 summarise all these techniques.

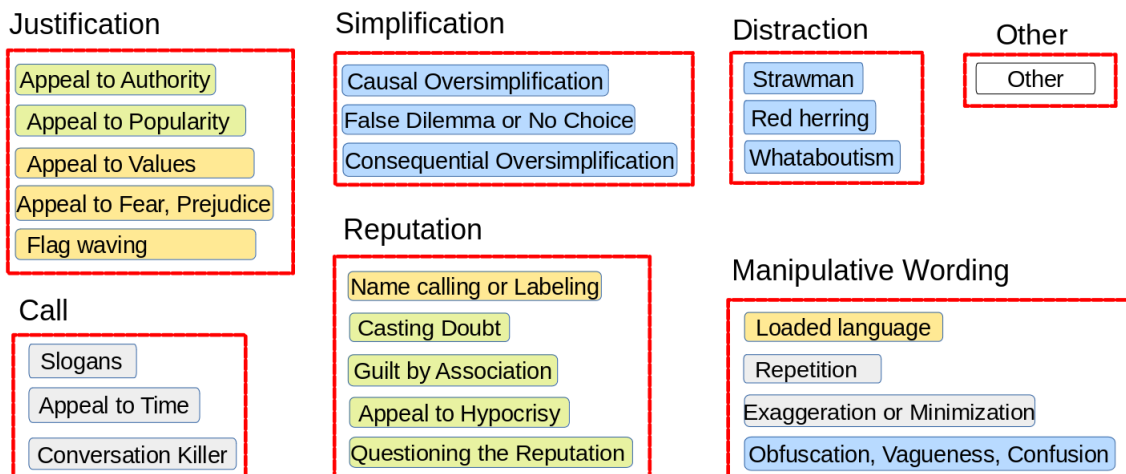


Figure 1: Techniques grouped by high-level approaches.

In the remainder part of this section, each persuasion technique is introduced and some examples are provided. We also provide some guidelines regarding what part

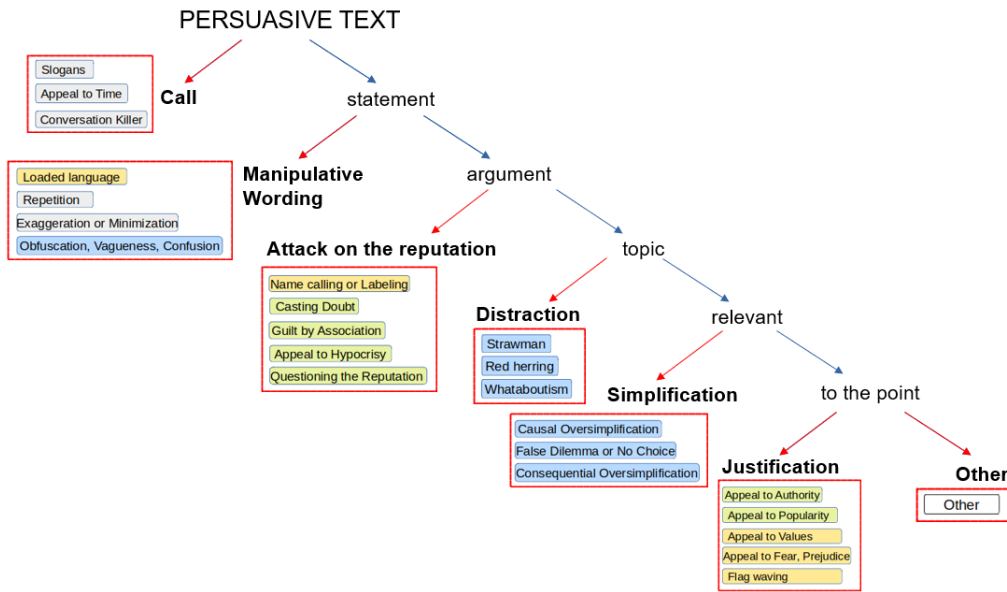


Figure 2: Decision diagram to determine which high-level approach is used in a text. The fine-grained techniques are marked in colour which was an attempt to reflect the rhetorical dimension: (a) ethos - appeal to authority (green), (b) logos - appeal to the logic (blue), and (c) pathos - appeal to emotions (yellow).

of the text needs to be annotated for each technique. The general rule is to annotate the minimum amount of text that can be considered as a trigger to spot the technique, even if it requires an understanding of the context that spans over more than one of the preceding sentences. Sometimes, the to-be-annotated text fragment might go beyond the boundaries of one single sentence. Finally, one should bear in mind that in the very same text fragment more than one persuasion technique can be used, and we will give examples of such cases as well.

## 6.1 Attack on Reputation of Persons, Opponents, and Objects

### 6.1.1 Name Calling or Labelling

A form of argument in which loaded labels are directed at an individual or a group, typically in an insulting or demeaning way, or as either something the target audience fears, hates, or on the contrary finds desirable or loves. This technique calls for a qualitative judgement that disregards facts and focuses solely on the essence of the subject being characterized. It is in a way also a manipulative wording, as it is used at the level of the nominal group rather than being a full-fledged argument with premise and conclusion. For example, in the political discourse, typically one is using adjectives and nouns as labels that refer to political orientation, opinions, personal characteristics, and association with some organisations, as well as insults. What distinguishes it from the Loaded Language technique (see 6.2.5), is that it is only concerned with the characterization of the subject.

Examples:

- "My opponent is a **flip-flop** man who cannot make up his mind. He changes mind with the breeze! How could anyone follow such a **weak-willed flip-flopper**?"
- "**'Fascist' Anti-Vax Riot Sparks COVID Outbreak in Australia.**"
- "Don't get a **rotten APPLE**. Trust what is inside **ANDROID**" [COMMERICAL]
- "La **piccola attivista svedese** era diventata un fenomeno mediatico globale, mentre oggi sembra scomparsa dalla scena" [ITALIAN]
- "Giuseppe Conte a Di Battista, ecco tutti i grillini che dovrebbero "arrossire" per le loro passate **posizioni filo putiniane**" [ITALIAN]
- **crétins nationalistes** [FRENCH]
- **apprentis médecins aux agendas obscurs** [FRENCH]
- "**аморальные предатели**" [RUSSIAN]

**WHAT TO ANNOTATE:** The noun phrase, the adjective that constitutes the label and/or the name. If quotation marks are used, they should be included in the annotation as well. In the examples above, the text fragments to be annotated are highlighted in yellow.

### 6.1.2 Guilt by Association (Reductio ad Hitlerum)

Attacking the opponent or an activity by associating it with another group, activity, or concept that has sharp negative connotations for the target audience. The most common example, which has given its name to that technique, is making comparisons to Hitler and the Nazi regime. However, it is important to emphasize that this technique is not restricted to comparisons to that group only. More precisely, this can be done by claiming a link or an equivalence between the target of the technique and any individual, group or event in the presence or in the past, which has or had an unquestionable negative perception (e.g., was considered a failure), or is depicted in such a way.

Examples:

- "**Do you know who else was doing that ? Hitler!**"
- "**Only one kind of person can think in that way: a communist.**"

- "He talks like an EU official!"
- "Manohar is a big supporter for equal pay for equal work. This is the same policy that all those extreme feminist groups support. Extremists like Manohar should not be taken seriously – at least politically."
- That company is aligned with eugenics movement.
- Washington ha nutrito i movimenti nazisti in Ucraina per molti anni. [ITALIAN]
- Les nazis ont fait la même chose avec les juifs [FRENCH]
- Stowarzyszenia Kultury Chrześcijańskiej im. Ks. Piotra Skargi to organizacja, założona m.in. przez Arkadiusza Stelmacha i Sławomira Olejniczaka – obaj panowie są także współzałożycielami Fundacji Ordo Iuris, znanej w Polsce z radykalnych działań prokatolickich [POLISH]
- Ci zaś, którzy nie pamiętają PRL, mogą sobie skojarzyć styl telewizji Jacka Kurskiego z Chinami albo innymi krajami Wschodu. [POLISH]
- "Путин - то же самое, что Гитлер" [RUSSIAN]
- "сравнение ковидных ограничений в Москве с холокостом" [RUSSIAN]

**WHAT TO ANNOTATE:** The part of text that refers to an entity and a mention of someone else (considered evil/negative) doing the same or similar thing that is considered negative. The mention of the activity of the target entity might be implicit. In the examples above, the text fragments to be annotated are highlighted in yellow.

**NOTE:** The main difference between Name calling and labelling and Guilt by Association is that the former is an insult/praise by using a specific term only (without reference to any idea/action), e.g., *the "nazi" president*, whereas the latter explicitly associates an idea/action pursued by the person attacked with somebody else doing similar thing, e.g., *He has a plan that reminds one of the plan the Nazis had*.

### 6.1.3 Casting Doubt

Casting doubt on the character or the personal attributes of someone or something in order to question their general credibility or quality, instead of using a proper argument related to the topic. This can be done for instance, by speaking about the target's professional background, as a way to discredit their argument. Casting doubt can also be done by referring to some actions or events carried out or planned by some entity

that are/were not successful or appear as (probably) resulting in a failure to achieve the planned goals.

Examples:

- "A candidate talks about his opponent and says: *Is he ready to be the Mayor?*"
- "This task is quite complex. *Is his professional background, experience and the time left sufficient to accomplish the task at hand?*"
- "If you have nothing to hide, you have nothing to fear."
- "Poco più del 5% degli immigrati vengono in Italia a lavorare. Quindi: perché li facciamo entrare? *A cosa diavolo servono?*" [ITALIAN]
- "Das Etikett „Desinformation“ ist nur ein *Deckmantel für autoritäre Zensur unter neuem Namen*" [GERMAN]
- "Zadziwiająco, że *PiS nie potrafi sięgnąć po pieniądze z Funduszu Odbudowy, a mami nam oczy nierealnym odszkodowaniem od Berlina.*" [POLISH]
- *qui a longtemps été ambivalente sur le sujet* [FRENCH]
- *le complexe pharmaceutique a caché à propos des vaccinations* [FRENCH]
- "Για μια ακόμη φορά, το Υπουργείο Πολιτισμού με έναν συνεχόμενο πόλεμο κατά του Πολιτισμού, προσπαθεί σε ένα σχέδιο νόμου-οδηγία της Ευρωπαϊκής Ένωσης, να προσθέσει ένα άρθρο το οποίο αφαιρεί από τα πνευματικά δικαιώματα των Ελλήνων δικαιούχων" [GREEK]
- *D'abord parce que les infos ne sont diffusées qu'au compte-gouttes, et via les gouvernements concernés.* [SPANISH]

**WHAT TO ANNOTATE:** Only the text fragment that questions the credibility and the object whose credibility is being questioned. There is no need to include the full context. In the examples above, the text fragments to be annotated are highlighted in yellow.

#### 6.1.4 Appeal to Hypocrisy (Tu Quoque)

The target of the technique is attacked on their reputation by charging them with hypocrisy or inconsistency. This can be done explicitly by calling out hypocrisy directly, or more implicitly by underlining the contradictions between different positions that were held or actions that were done in the past. A special way of calling out hypocrisy is by stating that someone who criticizes you for something you did, also did it in the past, hence the name of this technique (which means 'also you' in Latin).

Examples:

- *"How can you demand that I eat less meat to reduce my carbon footprint if you yourself drive a big SUV and fly for holidays to Bali?"*
- *"My parents used to speed on the highway, so they don't have any right to tell me to slow down."*
- *"Che fine hanno fatto quelli che, alle nostre latitudini, per quasi due anni hanno denunciato un'inesistente dittatura sanitaria? Come mai nessuno lancia petizioni, hashtag, foto e sit-in di protesta contro le violazioni dei diritti umani del regime di Pechino?"* [ITALIAN]
- *"Guardateli, sono tutti lì a stendere tappeti rossi a Giggino Di Maio, fino a poche settimane fa derubricato a inadeguato bibitaro e oggi elevato a statista di assoluto spessore"* [ITALIAN]
- *"une Banque centrale ne lutte pas contre l'inflation mais l'utilise à son profit."* [FRENCH]
- *"Depuis l'invasion de l'Ukraine par la Russie, le voilà humaniste."* [FRENCH]
- *Prorządowe media zdążyły jednak przekierować uwagę na ten swoisty „sukces” władzy — brak rtęci w rzece. Tysiące martwych ryb, skażenie Odry i opieszałość rządu w reakcji na ekologiczną katastrofę zeszły na dalszy plan.* [POLISH]

**WHAT TO ANNOTATE:** The text phrase embracing a certain activity, and another one which is used as an argument to accuse the former as being a hypocrite. In the examples above, the text fragments to be annotated are highlighted in yellow.

**NOTE:** This technique is related to Whataboutism, but the latter focuses on distracting from the topic, not on attacking the opponent directly. This technique can be seen as a specific type of Casting Doubt.

### 6.1.5 Questioning the Reputation (Smears/Poisoning the Well)

This technique is used to attack the reputation of the target by making strong negative claims about it, focusing in particular on undermining its character and moral stature rather than relying on an argument about the topic. Whether the claims are true or false is irrelevant for the effective use of this technique. Smears can be used at any point in a discussion. One particular way of using this technique is to preemptively call into question the reputation/credibility of an opponent, before he had any chance to express himself, therefore biasing the audience perception - hence one of the names of this technique is Poisoning the well.

The main difference between the Casting Doubt and Questioning the Reputation technique is that the former focuses on questioning the capacity, capabilities and credibility, while the latter attempts to undermine the overall reputation, moral qualities, behaviour, etc.

Examples:

- *"My opponent has a record of lying and trying to cover her dishonest dealings with a pleasant smile. Don't let her convince you to believe her words."*
- *I hope I presented my argument clearly. Now, my opponent will attempt to refute my argument by his own fallacious, incoherent, illogical version of history.*
- *Gli Stati Uniti e l'Europa, nel loro stile storico, pensano ancora in termini coloniali* [ITALIAN]
- *Tusk miał nietęgą minę, bo w pewnym sensie zagoniono go do roboty, do czego on się specjalnie nigdy nie garnął, ale grzecznie się uśmiechał za ten usłyszany zwrot, „drogi Donaldzie”. To „drogi” można rozumieć dosłownie, Tuskowe urządowanie sporo Unię kosztowało, ale nie wszystko potoczyło się w Polsce tak, jakby Unia sobie tego życzyła.* [POLISH]
- *L'on a un peu l'impression d'assister à un spectacle de marionnettes* [FRENCH]
- *Boris Johnson avec une régularité enviable se trouve à l'épicentre de scandales de grande envergure* [FRENCH]

- *Es más, si en algo son virtuosos es a la hora de encontrar nuevos motivos para la presión, la cancelación, la amenaza.* [SPANISH]
- "европейское единство терпит крах" [RUSSIAN]

**WHAT TO ANNOTATE:** Only the text fragments that refer to something negative being mentioned about the person/group/object. In the examples above, the text fragments to be annotated are highlighted in yellow.

**NOTE:** This technique can also be seen as a specific type of Casting Doubt.

## 6.2 Attack on the Argument

### 6.2.1 Justification

Justifications consist of two parts: a statement (to propose/support or not to propose/support something) and an explanation for it, which can be an appeal to values, nationalism, popularity, fear, etc. In this context, it is of paramount importance to understand that the sole occurrence of words and phrases referring to fear, values, nationalism, etc. DOES NOT per se qualify the respective text snippet to be labeled as some type of JUSTIFICATION persuasion technique. What is being justified has also to be present in the text, even if it appears in a broader context or is implicit.

### Flag Waving

Justifying or promoting an idea by extolling the pride of a group or highlighting the benefits for that specific group. The stereotypical example would be national pride, hence the name of the technique; however, the target group it applies to might be any group, e.g., related to race, gender, political preference, etc. The connection to nationalism, patriotism or benefit for an idea, group or country might be fully unfounded and is usually based on the presumption that the recipients already have certain beliefs, biases, and prejudices about the given issue. It can be seen as an appeal to emotions instead of to the logic of the audience aiming to manipulate them to win an argument. As such, this technique can also appear outside the form of well-constructed argument, by simply trying to resonate with the feeling of a particular group and as such setting up a context for further arguments.

Examples:

- "Patriotism mean no questions."
- "Entering this war will make us have a better future in our country."
- "We should make America great again, and restrict the immigration laws."



- *"Se proprio abbiamo bisogno di immigrati che lavorano - pochissimi - allora facciamo entrare solo quelli, non le nonne e i nipoti: perché altrimenti è immigrazione di ripopolamento. Di sostituzione etnica."* [ITALIAN]
- *Już nigdy nie pozwolimy, by na polskiej ziemi stanęła noga rosyjskiego żołnierza – dmie w sztandar narodowej dumy premier.* [POLISH]
- *La République est une et indivisible ; elle doit l'être aussi dans sa représentation sur les écrans.* [FRENCH]
- *Nous sommes un grand pays et pas seulement un morceau d'Europe* [FRENCH]

**WHAT TO ANNOTATE:** The part of the text that refers to patriotism or other group-related values, and the conclusion/action it is supposed to support if it is present in the text. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Appeal to Authority

This technique gives weight to a claim or thesis by simply stating that a particular entity considered as an authority, e.g., a person or an organisation, is the source of the information. The entity mentioned as an authority may, but does not need to be an actual valid authority in the domain-specific field to discuss a particular topic or to be considered and serve as an expert. What is important, and makes it different than simply sourcing an information, is that the tone of the text indicates that it capitalises on the weight of an alleged authority in order to justify some information, claim, or conclusion. Reference to a valid authority is not a logical fallacy, a reference to an invalid authority is, and both are captured within this label. In particular, a self-reference as an authority falls under Appeal to Authority too.

Examples:

- *"Richard Dawkins, an evolutionary biologist and perhaps the foremost expert in the field, says that evolution is true. Therefore, it's true."*
- *"If Napoleon said so it must be true then."*
- *"According to Serena Williams, our foreign policy is the best on Earth. So we are in the right direction."*
- *"Since the Pope said that this aspect of the doctrine is true we should add it to the creed."*

- *Tous les vaccinés du monde entier sont des "Transhumains", d'après une décision de la Cour Suprême des Etats Unis* [FRENCH]
- *Comme le dit André Bercoff, il faudrait donner à Poutine un prix Nobel de médecine pour avoir fait disparaître la COVID en moins d'une semaine* [FRENCH]
- *Nie „zbawiajmy” świata kosztem Polski, pięknie pisał Prymas Tysiąclecia* [POLISH]
- *Eksperci są zgodni – fizyki nie da się oszukać, z rewolucją klimatyczną trzeba będzie pójść na całość* [POLISH]

**WHAT TO ANNOTATE:** The part of the text that refers to the authority (and potentially some of his/her statement/opinion/action), and the conclusion it supports, in case the latter is present in the text. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Appeal to Popularity (Bandwagon)

This technique gives weight to an argument or an idea by justifying it on the basis that allegedly 'everybody' (or the large majority) agrees with it or 'nobody' disagrees with it. As such, the target audience is encouraged to adopt the same idea by considering 'everyone else' as an authority, and to join in and take the same course of action. Here, 'everyone else' might refer to the general public, key entities and actors in a certain domain, countries, etc. Analogously, an attempt to persuade the audience not to do something because 'nobody else is taking the same action' falls under our definition of appeal to popularity.

Examples:

- *"Everyone is going to get the new smart phone when it comes out this weekend."*
- *"Would you vote for Putin as president? 70% say yes"*
- *"Because everyone else goes away to college, it must be the right thing to do."*
- *"Les Allemands dans leur majorité soutiennent le projet* [FRENCH]
- *"La France et les Français voient avec angoisse leur pouvoir d'achat diminuer sous le régime Macron* [FRENCH]
- *Nessuno qui sta negando che la temperatura del pianeta stia aumentando* [ITALIAN]

- *Aż 65% badanych uważa, że niepełnoletność matki nie jest argumentem zezwalającym na aborcję* [POLISH]
- *Contra la que estamos la mayor parte de la sociedad española, aunque no estén aquí hoy físicamente.* [SPANISH]

**WHAT TO ANNOTATE:** The part of the text that refers to something that a majority does or seems to be widely supported and/or is popular together with the conclusion it is supposed to support. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Appeal to Values

This technique gives weight to an idea by linking it to values seen by the target audience as positive. These values are presented as an authoritative reference in order to support or to reject an argument. Examples of such values are, for instance: tradition, religion, ethics, age, fairness, liberty, democracy, peace, transparency, etc. When such values are mentioned outside the context of a proper argument by simply using certain adjectives or nouns as a way of characterising something or someone, then, they fall under another label, namely, Loaded Language, which is a form of Manipulative Wording.

Examples:

- *"We always did it according to the ten commandments."*
- *"It's standard practice to pay men more than women so we'll continue adhering to the same standards this company has always followed."*
- *"L'Europe, ce sont des valeurs économiques, des valeurs juridiques, mais aussi des valeurs morales. Dans ce cas, l'Ukraine n'a pas sa place en Europe, à moins qu'elle ne tourne le dos à son histoire"* [FRENCH]
- *"L'offensive actuelle de Vladimir Poutine est donc inacceptable au regard du droit international"* [FRENCH]
- *"Tradycyjne teksty hinduistyczne potępiają aborcję "* [POLISH]
- *"Είναι χρέος μας να διδάσκουμε στα παιδιά μας το ένδοξο παρελθόν, να τους διδάσκουμε πόσο αγωνίστηκαν οι πρόγονοί μας για να είμαστε σήμερα εμείς ελεύθεροι. "* [GREEK]

**WHAT TO ANNOTATE:** The part of the text that refers to values, and include the conclusion it is supposed to support, in case the latter is included explicitly in the text. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Appeal to Fear, Prejudice

This technique aims to promote or reject an idea through the repulsion or fear of the audience towards this idea (e.g., by exploiting some preconceived judgements) or towards its alternative. The alternative could be the status quo, in which case the current situation is described in a scary way with Loaded Language. If the fear is linked with the consequences of a decision, it is often the case that this technique is used together with Consequential Oversimplification (see 6.2.3), and if there are only two alternatives and they are stated explicitly, then it is used together with the False Dilemma technique.

Examples:

- *"Either we go to war or we will perish."* [this is also the False Dilemma fallacy]
- *"We must stop those refugees as they are terrorists."*
- *"If we don't bail out the big automakers, the US economy will collapse. Therefore, we need to bail out the automakers."*
- *It is a great disservice to the Church to maintain the pretense that there is nothing problematical about AL. A moral catastrophe is self-evidently underway and it is not possible honestly to deny its cause.*
- *"Ormai gli abitanti di Kiev e di Odessa sono casualmente implicati come carne da cannone. E se si va avanti così, in futuro si teme lo saremo anche noi."* [ITALIAN]
- *"Il Covid è stato solo l'inizio."* [ITALIAN]
- *Według najnowszych danych agencji badawczej Inquiry, aż 47 proc. respondentów w tej grupie deklaruje, że nie będzie się szczepić. Czy naprawdę w Polsce jesteśmy gotowi ryzykować życiem i zdrowiem naszych dzieci?* [POLISH]
- *La guerre de Graham entraînerait des centaines de milliers, ou plus probablement, des millions de morts* [FRENCH]
- *faisant fit de l'héritage historique de la France en apportant la honte sur nos origines sans se soucier des conséquences et nourrissant le terreau d'une prochaine guerre civile* [FRENCH]

- *"Su fauna y de su flora, y a las que se amenaza con embargar el futuro a base de un «monocultivo eléctrico»"* [SPANISH]

For the sake of clarity on labelling a text fragment as the JUSTIFICATION persuasion technique, let us consider the two following text snippets:

1. *"Putin said: "Russia has to carry out a special military operation in Ukraine since otherwise the Ukrainian nazi forces will invade Russia and they already planned to destroy and bomb some cities ..."*
2. *"Putin is using fear to support the rationale behind the special military operation in Ukraine"*

The first text snippet should be labelled as Justification: Appeal to fear (Putin is appealing to fear in order to justify his actions), while the second text snippet should be labelled as an Attack on Reputation (Putin is being criticized by the author of the article to use fear to support his actions].

**WHAT TO ANNOTATE:** The part of the text that refers to the fears, prejudices, e.g., of something that might happen. In the examples above, the text fragments to be annotated are highlighted in yellow.

## 6.2.2 Distraction

### Misrepresentation of Someone's Position (Strawman)

This technique appears to refute the opposing argument, but the real subject of the opposing argument is not addressed, but is instead replaced with a false one. Often, this technique is referred to as misrepresentation of the argument. First, a new argument is created via the covert replacement of the original argument with something that appears somewhat related, but is actually a different, distorted, exaggerated, or misrepresented version of the original proposition, which is referred to as 'standing up a straw man'. Subsequently, the newly created 'false' argument (the strawman) is refuted, which is referred to as 'knocking down a straw man'. Often, the strawman argument is created in such a way that it is easier to refute, and thus, creating an illusion of having defeated an opponent's real proposition. Fighting a strawman is easier than fighting against a real person, which explains the origin of the name of this technique. In practice, it appears often as an abusive reformulation or explanation of what the opponent 'actually' means or wants.

Examples:

- *"Referring to your claim that providing medicare for all citizens would be costly and a danger to the free market, I infer that you don't care if people die from not having healthcare, so we are not going to support your endeavour."*

- *the corporate (i.e. private sector) players in global governance are determined to have their agenda accepted everywhere — which is none other than to grant themselves full powers over the planet.*
- *un gouvernement démissionnaire qui nous fait comprendre chaque jour son manque d'intérêt pour nos vies* [FRENCH]
- *La banque centrale pourrait imprimer jusqu'à la fin des temps si elle le souhaitait, et c'est essentiellement ce qu'elle a fait* [FRENCH]
- *La pérdida potencial de votantes, las Juventudes Socialistas han difundido otro de esos vídeos tan maniqueos a los que ya nos tienen acostumbrados.* [SPANISH]
- *"вместо европейской солидарности соседи по ЕС стали закрывать с Италией границы"* [RUSSIAN]

**WHAT TO ANNOTATE:** When this technique is used, usually the relevant context might span across more sentences. However, one SHOULD ONLY annotate the text fragment (sentence or part thereof), which introduces the distraction. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Introducing Irrelevant Information (Red Herring)

This technique consists in diverting the attention of the audience from the main topic being discussed by introducing another topic. The aim of attempting to redirect the argument to another issue is to focus on something the person doing the redirecting can better respond to or to leave the original topic unaddressed. The name of that technique comes from the idea that a fish with a strong smell (like a herring) can be used to divert dogs from the scent of a prey they are following. A strawman (defined earlier) is also a specific type of a red herring in the way that it distracts from the main issue by painting the opponent's argument in an inaccurate light.

Examples:

- *"I have worked hard to help eliminate criminal activity. What we need is economic growth that can only come from the hands of leadership."* [Defending one's own policies regarding public safety]
- *"Lately, there has been a lot of criticism regarding the quality of our product. We've decided to have a new sale in response, so you can buy more at a lower cost!"*
- *"L'enquête avait révélé qu'Elena Baturina, femme d'affaires et veuve de Iouri Loujkov – avec lequel Donald Trump a lui-même tenté, sans succès, de faire affaire"*

*dans les années 1990 –, aurait versé 3,5 millions de dollars à la société Rosemont Seneca Thornton*" [FRENCH]

- "Сегодня производство масок, необходимых для борьбы с пандемией, сосредоточено в Китае (до 90%)" [RUSSIAN]

**WHAT TO ANNOTATE:** When this technique is used, usually the relevant context might span across more sentences. However, one SHOULD ONLY annotate the text fragment (sentence or part thereof), which introduces the distraction. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Switching Topic (Whataboutism)

A technique that attempts to discredit an opponent's position by charging them with hypocrisy without directly disproving their argument. Instead of answering a critical question or argument, an attempt is made to retort with a critical counter-question which expresses a counter-accusation, e.g., mentioning double standards, etc. The intent is to distract from the content of a topic and actually switch the topic.

Examples:

- "A nation deflects criticism of its recent human rights violations by pointing to the history of slavery in the United States."
- "Qatar spending profusely on Neymar, not fighting terrorism."
- "Quant à savoir s'il s'agit de la meilleure stratégie pour garantir l'habitabilité de la planète, c'est une toute autre question" [FRENCH]
- "Bien sûr, les actions militaires sont toujours horribles et sont d'autant plus condamnables lorsqu'elles touchent des populations civiles. Toutefois, l'offensive Russe en Ukraine, est-elle plus que l'invasion américaine en Irak en 2003? Ces événements ont eux aussi causé des décès de civils sans pourtant soulever l'ire de la bien-pensance occidentale" [FRENCH]

**WHAT TO ANNOTATE:** When this technique is used, usually the relevant context might span across multiple sentences. However, one SHOULD ONLY annotate the text fragment (sentence or part thereof) that introduces the distraction. In the examples above, the text fragments to be annotated are highlighted in yellow.

**CAUTION:** There is a fine distinction between Tu Quoque and Whataboutism. The former is an attack on reputation and highlights the hypocrisy of double standards on a very same topic, while the latter is an attack on the argument and introduces irrelevant information to the main topic, which can among others, but not necessarily, aim

to highlight some form of general hypocrisy or incompetence.

For instance: "*in the wake of the failure, the president is calling for us to resign, but won't do it himself*" is Tu Quoque, while "*This president, which wasn't even elected, is not able to handle this crisis*" is Whataboutism.

### 6.2.3 Simplification

#### Causal Oversimplification

Assuming a single cause or reason when there are actually multiple causes for an issue.

This technique has the following logical form(s):

Y occurred after X; therefore, X was the only cause of Y

X caused Y; therefore, X was the only cause of Y  
(although A,B,C...etc. also contributed to Y.)

Examples:

- "*President Trump has been in office for a month and gas prices have been skyrocketing. The rise in gas prices is because of President Trump.*"
- "*School violence has gone up and academic performance has gone down since video games featuring violence were introduced. Therefore, video games with violence should be banned, resulting in school improvement.*"
- "*Dabei geht es der EU aber lediglich darum, weitere legale Eingangswege nach Europa einzurichten, um so zu billigen Arbeitskräften zu kommen*", erklärte heute, Donnerstag, Harald Vilimsky, freiheitlicher Delegationsleiter im Europaparlament. [GERMAN]
- "*la raison pour laquelle les prix de l'essence sont en hausse c'est à cause de la Russie.* [FRENCH]
- "*Cette corruption rampante est là pour cacher au public des vérités scientifiques* [FRENCH]

**WHAT TO ANNOTATE:** The minimal text fragment that matches the logical pattern above or a false conclusion drawn therefrom (see second example) should be annotated, although, often not all parts of the pattern above are explicitly mentioned in the text. In the examples above, the text fragments to be annotated are highlighted in yellow.



## False Dilemma or No Choice (Black & White Fallacy, Dictatorship)

Sometimes called the “either-or” fallacy, a false dilemma is a logical fallacy that presents only two options or sides when there are many options or sides. In extreme cases, the author tells the audience exactly what actions to take, eliminating any other possible choices (hence the label Dictatorship).

This technique has the following logical form:

(a) Black & White Fallacy:

There are only two alternatives A and B to a given problem/task. It cannot be A. Therefore, the only solution is B (since A is not an option).

(b) Dictatorship

The only solution to a given problem/task is A.

Examples:

- *"Either we raise new taxes, or the roads will become unusable."*
- *"There is no alternative to Pfizer Covid-19 vaccine."*
- *Była zastępczyni rzecznika praw obywatelskich w rozmowie z Interią stwierdziła, że „potrzebna jest partia, która w sposób pryncypialny podejdzie do kwestii walki z katastrofą klimatyczną i bezkompromisowo do praw zwierząt”. - Bez weganizmu taka perspektywa nie będzie możliwa - oceniła. [POLISH]*
- *L'élimination physique de Vladimir Poutine est la seule solution pour arrêter le conflit [FRENCH]*
- *Porque, de lo contrario, la carga acabará recayendo, como ya sucede, sobre las comarcas más despobladas. [SPANISH]*
- *"Или вы говорите, что президент Зеленский герой, или вы пропутинская марионетка" [RUSSIAN]*

**WHAT TO ANNOTATE:** The minimal text fragment that matches the logical pattern above should be annotated, although, often not all parts of the pattern above are explicitly mentioned in the text. In the examples above, the text fragments to be annotated are highlighted in yellow.

## Consequential Oversimplification (Slippery Slope)

An argument/idea is rejected and instead of discussing whether it makes sense and/or is valid, the argument affirms, without proof, that accepting the proposition would imply accepting other propositions that are considered negative.

This technique has the following logical form:

if A will happen then B, C, D, ... will happen

In the above definition:

- A is something one is trying to REJECT
- B, C, D are perceived as some potential negative consequences happening if A happens.

The core essence behind the 'Slippery Slope' (Consequential Oversimplification) is an assertion one is making of some 'first' event/action leading to a domino-like chain of events that have some significant negative effects and consequences that appear to be ludicrous.

The slippery slope is characterized by **ignoring and/or understating the likelihood of the sequence of events from the first event leading to the end point** (last event) of the slope.

In order to take into account symmetric cases, i.e., using consequential oversimplification to PROMOTE/SUPPORT certain actions in a similar way (some authors in the literature also consider it this way), we also consider Slippery slope can be used in the context of leading to positive outcomes. So, encouraging people to undertake a certain course of action, with the promise of a major positive event in the end is also to be considered as a kind of 'inverted' Slippery Slope, to put it in other words a 'Stairway to heaven'.

Consequently, in the logical form:

if A will happen then B, C, D, ... will happen

- A is something one is trying to SUPPORT
- B, C, D are perceived as some potential positive consequences happening if A happens.

Examples (Rejection):

- *"If we allow same-sex marriage, we will soon see marriage between siblings or even marriages between humans and animals!"*
- *"If we let our government ban certain guns, they will eventually ban all guns."*
- *If we legalize pot, then that will lead to every drug in the world becoming legal.*
- *Today, women want the vote. Tomorrow, they'll want to be doctors and lawyers, and then combat soldiers.*

- *"Dziś Wielki Dzień Pszczół. Ginie ich miliony przez zmiany klimatyczne. A jeśli nadal będziemy je zabijać, np. używając neonikotynoidów to wkrótce będziemy obchodzić Dzień Wspomnienia o Pszczołach."* [POLISH]
- *"If you give a mouse a cookie, then he's going to ask for a glass of milk. When you give him the milk, he'll probably ask you for a straw. When he's finished, he'll ask for a napkin, then. . ."*
- *"I really should not eat this slice of pizza because if I do I'll probably lose all control and go off my diet, and then I'll keep gaining weight and eventually get diabetes".*
- *"If we begin to restrict freedom of speech, this will encourage the government to infringe upon other fundamental rights, and eventually this will result in a totalitarian state where citizens have little to no control of their lives and decisions they make."*
- *"If you allow the students to redo this test, they are going to want to redo every assignment for the rest of the year."*
- *"If we let this child bring the permission slip late, there is no reason to ever set a deadline for anything again!"*
- *"If we increase the number of immigrants that we let into the country, we will eventually end up letting in anyone who wants to immigrate, and then the whole country will be destroyed."*
- *"Cette banqueroute de l'Etat permettra de « justifier », avec des airs faussement navrés, la liquidation du modèle social et la vente à l'encan de ce qui reste du patrimoine national. [FRENCH]*
- *"dès que les températures montent, la panique s'installe dans le pays et de nouvelles interventions étatiques liberticides se multiplient. [FRENCH]*
- *"Τί θα ακολουθήσει· Συλλήψεις, εξορίες, βασανιστήρια και τανκ" [GREEK]*
- *"Украина может исчезнуть с карты мира, если продолжить снабжать ее оружием" [RUSSIAN]*

Examples (Support):

- *"If we stop buying gas from Russia, Russia will go bankrupt, and this will lead to the end of the war in Ukraine, which will start the process of Ukraine joining NATO ...."*
- *"If only the European leaders could take the fate of the European countries into their own hands, instead of letting them drift into the Atlantist swamps, the conflict would end immediately"*

**WHAT TO ANNOTATE:** The entire text fragment that matches the above logical pattern should be annotated. In the examples above, the text fragments to be annotated are highlighted in yellow.

#### 6.2.4 Call

##### Slogans

A brief and striking phrase that may include labeling and stereotyping. Slogans tend to act as emotional appeals.

Examples:

- *"Our **"unity in diversity"** contrasts with the divisions everywhere else."*
- *"**"Make America great again!"**"*
- *"**"Immigrants welcome, racist not!"**, **"No border. No control!"**"*
- *"**"Alle multikulturellen Gesellschaften sind dem Untergang geweiht."** [GERMAN]*
- *"**"Stop Ukrainizacji Polski!"**" [POLISH]*
- *"**"Quand on veut, on y met les moyens !"** [FRENCH]*
- *"**"« Zéro Covid »** [FRENCH]*
- *"**"Δεν έτυχε, ΔΕΝ πέτυχε"** [GREEK]*
- *"**"Porque empieza a ser hora de preocuparse de verdad."** [SPANISH]*
- *"**"Победили нацизм и фашизм - победим и рашизм"** [RUSSIAN]*

- "Никогда снова" [RUSSIAN]

**WHAT TO ANNOTATE:** The slogan only (no need to annotate the conclusion it supports), and in case it is surrounded by quotation marks, include them as well. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Conversation Killer (Thought-terminating Cliché)

Words or phrases that discourage critical thought and meaningful discussion about a given topic are considered as Conversational killers. They are a form of loaded language, often passing as folk wisdom, intended to end an argument and quell cognitive dissonance.

Examples:

- "Just Say No."
- "That's just your opinion."
- "You can't change human nature."
- "La situazione non tornerà mai più a quella di prima." [ITALIAN]
- "Taka jest prawda i koniec." [POLISH]
- "To niepodważalny fakt, że dane te są prawdziwe" [POLISH]
- "Fin de la discussion" [FRENCH]
- "rien de plus flagrant" [FRENCH]
- "не оставляет Германии выбора" [RUSSIAN]

**WHAT TO ANNOTATE:** A minimal text span that triggers ending the conversation, discussion, etc. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Appeal to Time (Kairos)

The argument is centred around the idea that time has come for a particular action. The very timeliness of the idea is part of the argument. The call to "Act Now!" is an example of Appeal to Time.

Examples:

- "If majority of the population does not get vaccinated within a month the pandemic will kill us! So, we need to start vaccinations right now."
- "This is no time to engage in the luxury of cooling off or to take the tranquilizing drug of gradualism. Now is the time to make real the promises of democracy. Now is the time to rise from the dark and desolate valley of segregation to the sunlit path of racial justice." [Martin Luther King, 1963]
- Should we vaccinate the entire population in the context of the current pandemic? This is the right time to do it, and this is the right thing.
- "A meno che la Russia non venga rapidamente sconfitta in Ucraina, l'Occidente collettivo non sarà in grado di affrontare il cambiamento climatico in tempo per salvare la civiltà." [ITALIAN]
- "Greta Thunberg przekonywała w piątek na wiecu w Glasgow, że konieczne są natychmiastowe i drastyczne cięcia emisji gazów cieplarnianych, aby zatrzymać zmiany klimatu, gdyż świat dosłownie płonie" [POLISH]
- "Johnson et Macron avaient convenu que c'était maintenant un « moment critique pour le déroulement du conflit » et qu'il y avait une « opportunité de renverser le cours de la guerre »" [FRENCH]
- "Il est urgent d'arrêter cette course folle qui entraîne un désenchantement des citoyens" [FRENCH]

Please note that in the last example the word 'it' is the reference to the action mentioned in the first sentence; therefore, there is no need to annotate the first sentence ("minimal text length" principle).

**WHAT TO ANNOTATE:** A minimal text span referring to the argument of time that calls for some action. Both the call and the action should be annotated. In the examples above, the text fragments to be annotated are highlighted in yellow.

## 6.2.5 Manipulative Wording

### Loaded Language

This fallacy uses specific words and phrases with strong emotional implications (either positive or negative) to influence and to convince the audience that an argument is valid/true. It is also known as appeal to/argument from emotive language.

Examples:

- "How **stupid** and **petty** things have become in Washington"
- "They keep feeding these people with **trash**. They should stop."
- **Die Hexenjagd gegen die Wahrheit** [GERMAN]
- "Oni się chcą tylko **nachapać i nakraść**." [POLISH]
- "**racolait les foules**" [FRENCH]

, **WHAT TO ANNOTATE:** Only the phrase containing loaded words, the context in which they appear SHOULD NOT be annotated (see examples above). As a general rule one should consider to tag longer text fragment if and only if each of the words adds more emotional 'load' to the text fragment.

For instance, the word *invasion* can be considered loaded language. The phrase *Russian invasion* is even more loaded through the addition of the word *Russian*. However, if one extends the phrase to *Russian invasion of Ukraine*, the added fragment *of Ukraine* does not bring more emotional load. Therefore, the correct annotation of loaded language for the complete phrase is **Russian invasion of Ukraine**

### **Obfuscation, Intentional Vagueness, Confusion**

This fallacy uses words that are deliberately not clear so that the audience may have its own interpretations. For example, an unclear phrase with multiple or unclear definitions is used within the argument and, therefore, does not support the conclusion. Statements that are imprecise and intentionally do not fully or vaguely answer the question posed fall under this category too.

Examples:

- "**It is a good idea to listen to victims of theft. Therefore if the victims say to have the thief shot, then you should do that.**" ["listen to" is equivocated here]
- "**We will hex-develop the blockchain with AI-based interconnectors to maximize ROI.**" [use of nonsense words]
- "**Feathers can not be dark, because all feathers are light!**"

- *The significance of the passage of time, right? The significance of the passage of time. So when you think about it, there is great significance to the passage of time.*
- *Nous sommes entrés dans un monde extrêmement complexe qui ne peut plus être maîtrisé tant les implications sont nombreuses et variées, avec des échelles de temps et des boucles de rétroaction tout aussi complexes.* [FRENCH]
- *Nie należy pogłębiać tematu, tak jak wykonawca nie pogłębił kanału, więc zamiast statków będą tam pływać kajaki.* [POLISH]

**WHAT TO ANNOTATE:** The minimal text fragment that introduces confusion: it could be a word, but also a longer piece of text that requires to be read in order to understand the confusion it causes. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Exaggeration or Minimisation

This fallacy consists of either representing something in an excessive manner – making things larger, better, worse (e.g., ‘*the best of the best*’, ‘*quality guaranteed*’) – or making something seem less important or smaller than it really is (e.g., saying that an insult was just a joke), downplaying statements and ignoring arguments and accusations made by an opponent.

Examples:

- *"Democrats bolted as soon as Trump's speech ended in an apparent effort to signal they can't even stomach being in the same room as the president."*
- *"Why did you fight her? I was not fighting with her; we were just playing."*
- *From the seminaries, to the clergy, to the bishops, to the cardinals, homosexuals are present at all levels, by the thousand.*
- *Wladimir Putin, der Präsident Russlands, ist die am meisten verteufelte Person in der westlichen Welt seit Osama bin Laden und Adolf Hitler.* [GERMAN]
- *"Aborcja to tylko zabieg medyczny"* [POLISH]



- "*danger gigantesque et historique*" [FRENCH]
- "*l'incompétence médiatique est à son paroxysme*" [FRENCH]
- "*Conte non voterà la fiducia a Draghi, ha scommesso sulle elezioni ma lo aspetta un crollo. Siamo in una situazione surreale, dovevamo occuparci di problemi reali del paese.*" [ITALIAN]
- "Σήμερα είναι κυρίαρχη μια πολιτική που επιδίδεται σε ληλασία της κοινωνίας κι αυτό με όρους καθημερινότητας" [GREEK]
- "Ντροπή, ντροπή, γιατί πριν από μερικά χρόνια είχαμε Δημοκρατία. Τώρα δεν έχουμε. Έχουμε κοινοβουλευτική δικτατορία." [GREEK]
- "И вот эти бесконечные программы помощи от европейских стран, от НАТО" [RUSSIAN]

**WHAT TO ANNOTATE:** The text fragment that provides the description that downplays or exaggerates the object of criticism. The latter should be included in the annotated text as well. In the examples above, the text fragments to be annotated are highlighted in yellow.

### Repetition

The speaker uses the same word, phrase, story, or imagery repeatedly with the hopes that the repetition will lead to persuading the audience.

Examples:

- "*Hurtlocker deserves an Oscar. Other films have potential, but they do not deserve an Oscar like Hurtlocker does. The other movies may deserve an honorable mention but Hurtlocker deserves the Oscar.*"
- "*Stupid people are so annoying. They prove their stupidity by saying stupid things.*"
- "Δεν έτυχε, ΔΕΝ πέτυχε." [GREEK]

**WHAT TO ANNOTATE:** All text fragments that repeat the same message or information that was introduced earlier. The first occurrence of the message/information is to be annotated as well. If it is not clear what exactly to annotate, e.g., repetitions are

present in the same sentence like in the second example above, then the entire sentence should be annotated. Furthermore, it is important to emphasize that a repetition of something per se is not always a persuasion technique, but could sometimes be used only to refer to a topic/issue being discussed. In the examples above, the text fragments to be annotated are highlighted in yellow.

### 6.2.6 Other

This category is to be used when encountering a piece of text that appears to the annotator to have a persuasive character, but does not fall under any of the categories listed before.

**WHAT TO ANNOTATE:** The text fragment considered as an attempt of persuasion. Since this category is open ended, there are no strict rules here.

## 6.3 Hints for Annotation of Persuasion Techniques

This Section contains some hints for the annotation of persuasion techniques.

- By default one should apply the 'conservative approach' to the annotation of persuasion techniques, i.e., if one has doubts whether a given text fragment contains a persuasion technique, then it is NOT TO BE ANNOTATED.
- By default, one should select the minimal amount of text to annotate in case of doubts whether to include a longer text fragment or not.
- One should AVOID PERSONAL BIAS, i.e., one's OWN EMOTIONS AND OPINIONS on the specific topic being discussed in the text HAVE NOTHING TO DO WITH the ANNOTATION of the articles!
- One should NOT CONFUSE PERSUASION TECHNIQUE DETECTION WITH FACT-CHECKING. A given text fragment might contain a claim that is known to be true, but that does not imply there are no persuasion techniques to annotate in this particular text fragment.
- It is of utmost importance to read thoroughly the annotation guidelines and to stick to the definitions provided therein since frequently annotators tend to interpret the names of the persuasion techniques as the sole guidance, which might result in overusing certain persuasion technique labels. We have observed this phenomenon in particular in the context of annotating Simplification persuasion techniques, where the annotators often make some assumptions based on their prior experience in the context of media analysis. Not everything that looks like 'simplification' falls under the definition of Simplification in the persuasion technique taxonomy at hand.

- Often, one might feel confident to have spotted a persuasion technique, but it is not clear which one to choose from a certain family of techniques, in such cases one SHOULD USE THE GENERIC TYPES, i.e., Attack on reputation, Distraction, Justification, Simplification, Call, Manipulative wording.
- Often, authors of news articles and other documents use irony (not covered by the taxonomy of persuasion techniques described in this document), which in most cases serves a purpose that is covered by the current persuasion technique taxonomy, most frequently to attack the reputation of someone/something. In such cases, the respective persuasion technique type should be used, or Other if it does not fall under any other type.
- Annotations may overlap or be nested, and this is a frequent phenomenon.
- One may come across articles without any persuasion techniques therein, so do not look for something that is not there!
- One SHOULD NOT EXPLOIT EXTERNAL KNOWLEDGE to decide whether given text fragment should be tagged as a persuasion technique.

## 7 Flashcard Training

A set of flashcards have been developed in order to train and re-train annotators on persuasion techniques. It is hosted on a website: <https://www.persuasiontechniques.space/>, and has been developed as a clone of <http://memcode.com> (MIT license project) to provide annotators with a shared understanding of the annotation task. The site provides selected examples of persuasion technique annotations using the ‘flashcard’ spaced repetition approach<sup>4</sup>, which consists of presenting a ‘problem’, and then showing a ‘solution’, asking the user to rate their performance for future review reprogramming.

The user is presented with a single flashcard that contains a text snippet highlighted in bold, meaning it is an instance of a persuasion technique, and surrounded by its context within the text (50 characters before and after that highlighted text span). The user then needs to think of an applicable persuasion technique and compare it with the ground-truth solution.

Once a user has registered to the platform, he is granted access and presented with two types of flash cards for their target language:

- MCQ (3 recommended responses taken from the same category are proposed to choose from to make the task easier): for newcomers/beginners
- STANDARD (there is no indication of possible solution): for more knowledgeable annotators

Figure 3 provides a screenshot with an example of a MCQ flashcard.

The user can select which flashcards he wants to be trained on, which he will repeat until he gains full confidence in the persuasion technique annotation. By default all

<sup>4</sup>[https://en.wikipedia.org/wiki/Spaced\\_repetition](https://en.wikipedia.org/wiki/Spaced_repetition))

## Persuasion techniques: IT (MCQ)

LEARN (137) REVIEW (3)

REVIEW - we are repeating due flashcards. Press ENTER to reveal answers. Use arrows ◀ ▶ to rate yourself.

🗨️ 🔊 🔇 RANDOMIZE

<p>tile materialmente tutto ciò che ci circonda. Ma il problema allora - voi direte - sono gli uomini. <b>Non è così</b>, perché per quanto ne possano dire catastrofisti ed hyppie l'uomo è l'agente ecologico decisivo per</p> <p>Choose one from: [ Call: Slogans ] [ Call: Conversation Killer (Thought-terminating cliché) ] [ Call: Appeal to Time (Kairos) ]</p>	<p>Call: Conversation killer (Thought-terminating cliché)</p>
---	---

You can draft your answer here

RATE YOUR ANSWER ●



Figure 3: An example of MCQ Flashcard. A text snippet with three suggested persuasion technique (LEFT window) and correct answer (RIGHT window).

flashcards are selected. This platform can inform the support team of potential issues to be addressed during weekly meetings, which can serve to complete the annotation of a given set of texts by looking into cases still causing confusion for the users while improving the 'solution' accuracy.

### Quick user guide:

- The user selects the course and then chooses the review all option. He has the option to randomize the order.
- When presented with an input text snippet, the user thinks of a persuasion technique present therein, and compares his answer vis-a-vis the ground truth by pressing the Enter key.
- Next, one can rate one's answer by clicking on a rating scale, a number in the range between 1 and 5, or alternatively by using the keyboard left and right arrow. The rating refers to how 'far' the answer was from the ground truth, where 5 denotes perfect match, and 1 denotes complete mismatch. In case of low confidence as regards how much 'wrong' the user's answer was, choosing a lower rating will result in more emphasis being put on retraining the particular persuasion technique type.
- Once the current text snippet is completed, one has to click the Next button to proceed to the next flashcard.

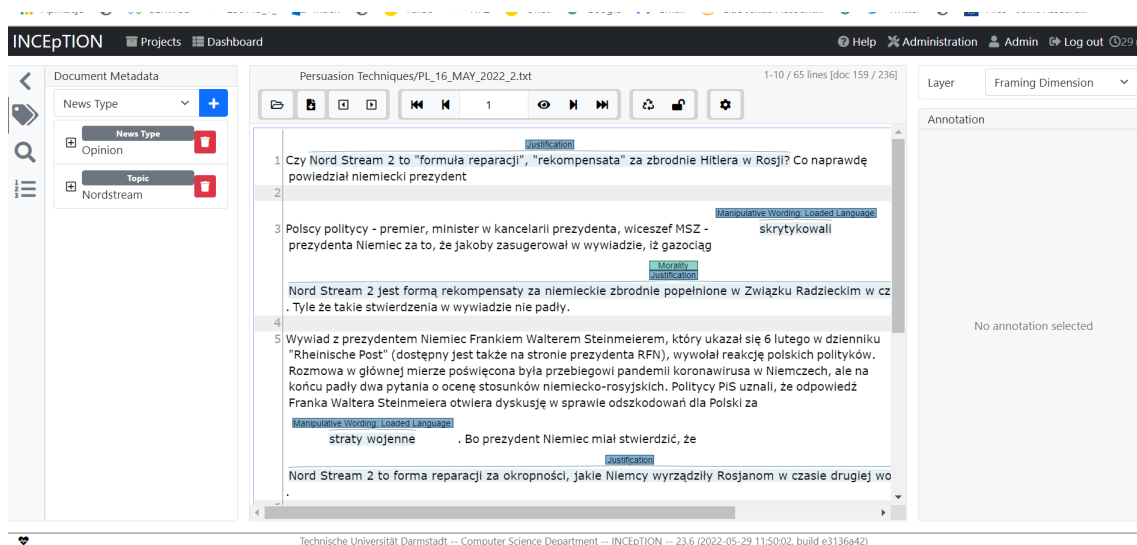


Figure 4: Inception main screen.

## 8 Inception - the Annotation Tool

This Section provides the essential information about the Inception<sup>5</sup> annotation tool used to carry out the annotations. The Inception instance for the project can be accessed via a web browser at: <https://alpha.emm4u.eu/inception>. The prerequisite is an ECAS account to get authenticated. The main screen of Inception is shown in Figure 4.

In the remainder of this Section, we describe briefly all the steps needed to use Inception.

### 8.1 Annotation

1. **Access Inception:** using this link: <https://alpha.emm4u.eu/inception>
2. **Select the project:** on the first page. There are two alternatives:
  - Propaganda: For the trial annotations and getting acquainted with how to use the tool,
  - Persuasion techniques: For the official annotations
3. **Start annotations:** Click on the project to start the annotations and select the Annotations button (see Figure 5).
4. **Select a document:** in your assigned language (see Figure 6): German, English, French, Italian, Polish, Russian, etc.

<sup>5</sup><https://inception-project.github.io/>

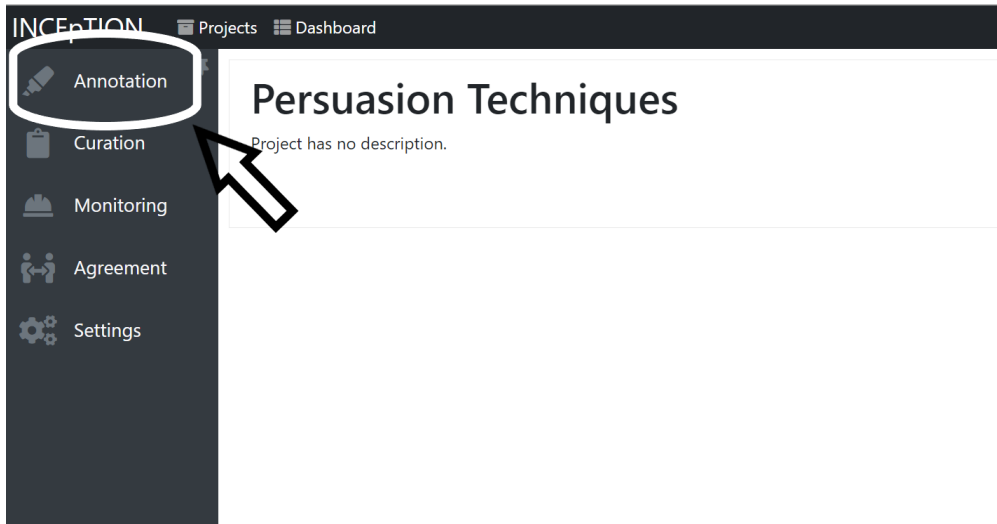


Figure 5: Access to the annotations

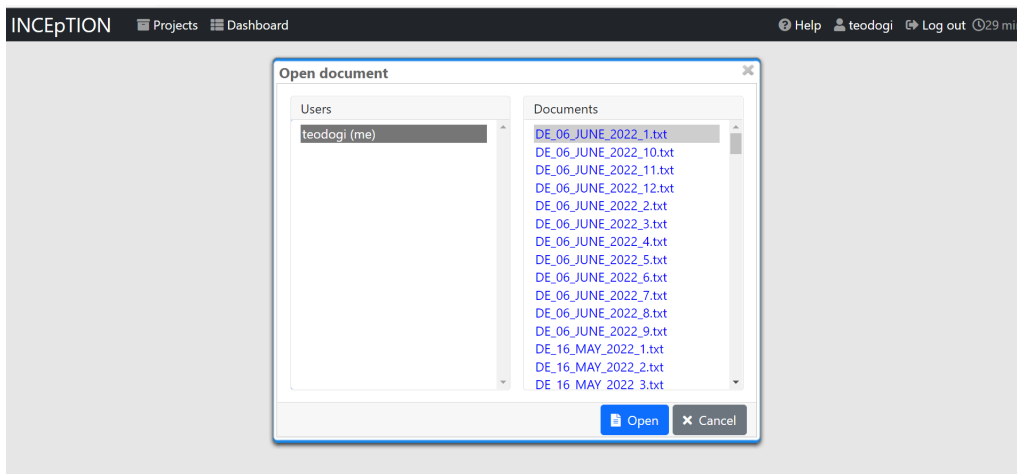


Figure 6: Selection of the documents

5. **Decide on what to annotate:** For each document, you must annotate the news type, the topic, the framing dimensions, and the persuasion techniques.
6. **Annotating News Type and Topic:** the annotations are done at the document level and on the left part of the screen it will be possible to select one of these two options (see Figure 7). Click on the **PLUS** and the list of categories and topics will be shown respectively (see Figure 8) to select from.

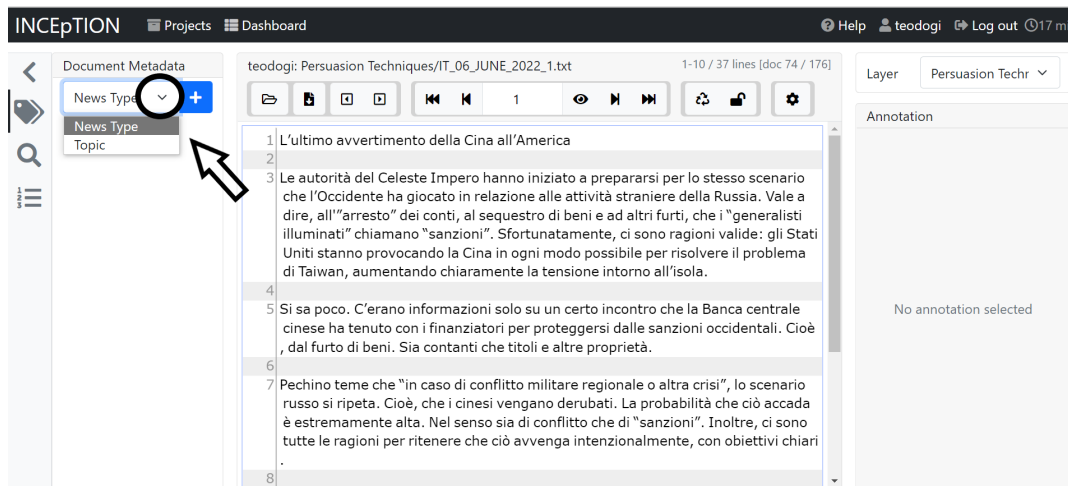


Figure 7: News type and topic.

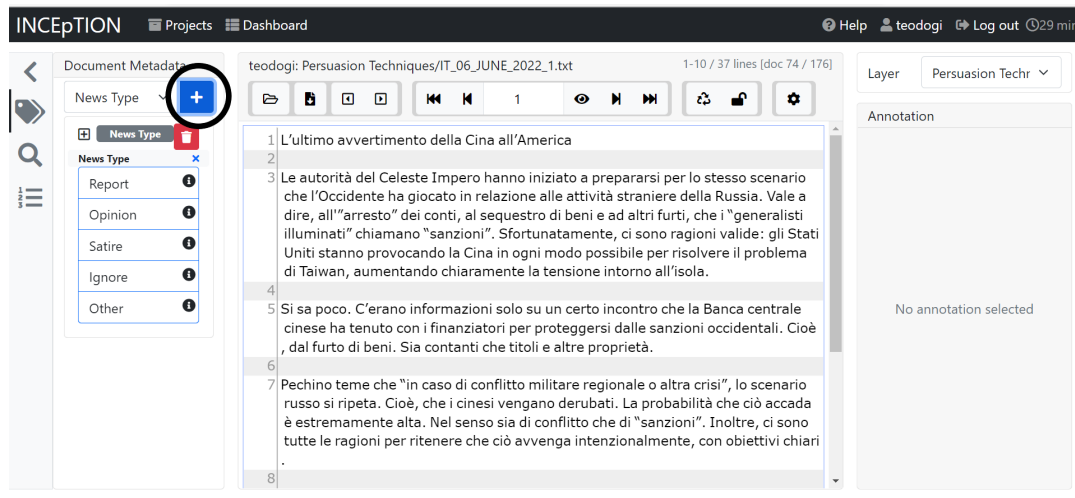


Figure 8: List of the categories.

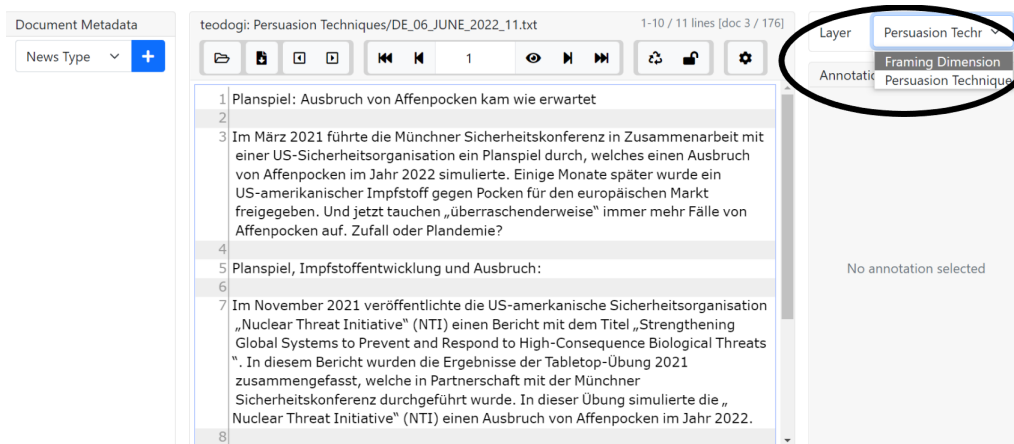


Figure 9: Framing dimension.

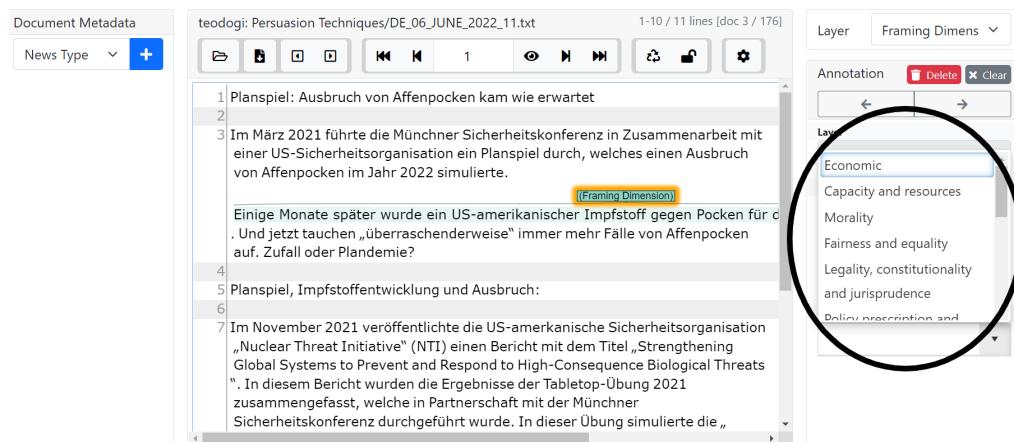


Figure 10: List of the framing dimensions.



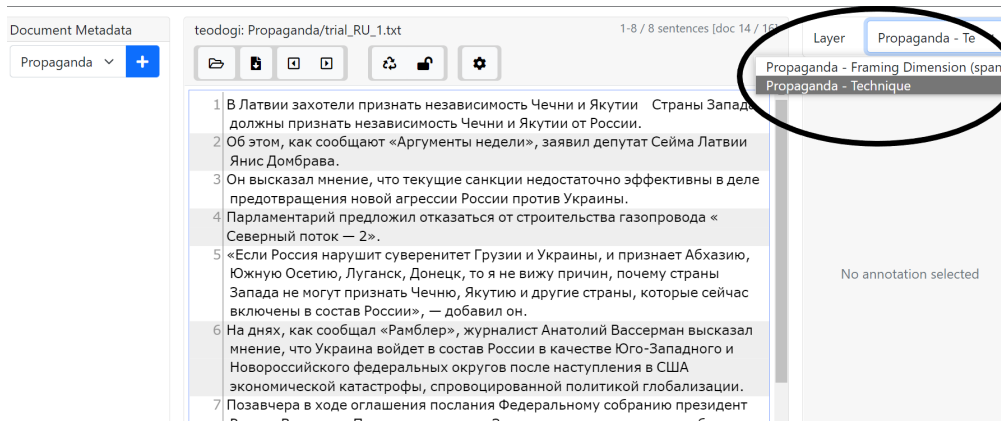


Figure 11: Propaganda technique.

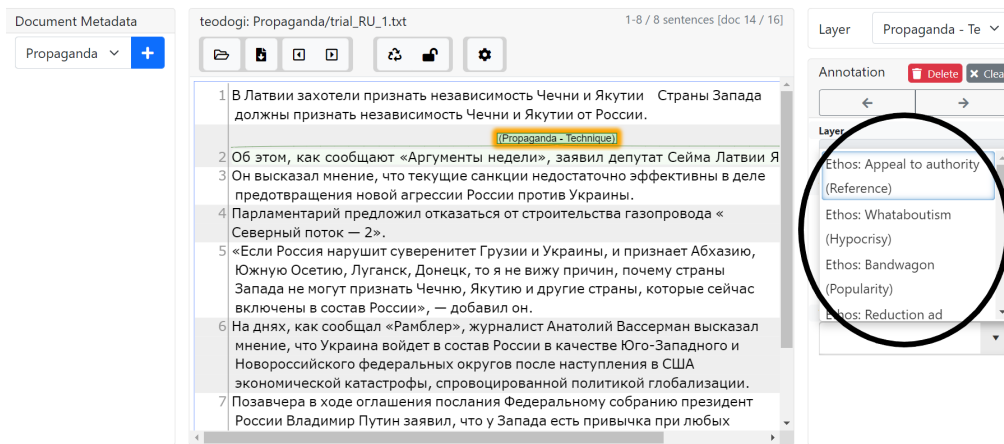


Figure 12: List of the persuasion techniques.

7. **Annotating Framing Dimensions:** On the right part of the screen, one has to select the Framing Dimension layer from the layers list (see Figure 9).
8. **Text span annotation:** Highlight the single word, phrase, sentence or longer text fragment, and then it will be possible to choose the appropriate framing dimension from the list of 15 available (see Figure 10).
9. **Annotating Persuasion Techniques:** As before, it is necessary to select the layer: Propaganda Technique (see Figure 11).
10. **Text span annotation:** Highlight the single word, phrase, sentence or longer text fragment, and then it will be possible to choose the appropriate persuasion technique from the list of 23 available (see Figure 12).
11. **Moving to the next document:** Once the document has been completely

annotated, it is possible to simply move to the next document using the next document arrow (see Figure 13). The saving is automatic.

12. **Finalizing the work on a document:** Once the document has been completely annotated and no further changes are envisaged, one should click on the lock button to finalize the work (see Figure 14). Only the curator will be able to unlock the document.

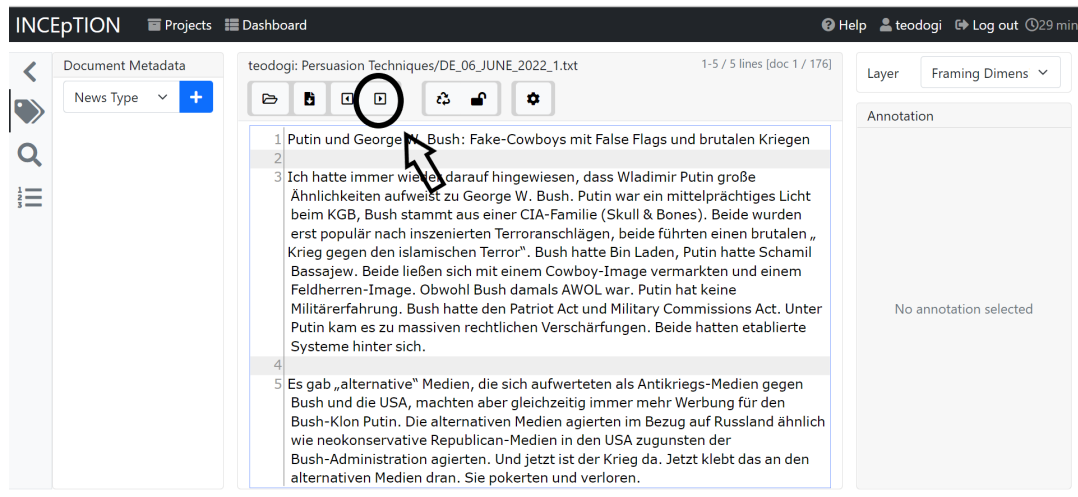


Figure 13: Next document command

**NOTE:** Some documents may be longer than one page. In this case, it is necessary to scroll through the whole text using the next page arrow as shown in Figure 15.

Some documents may be bigger than the displayed view. In this case, use the vertical bar to scroll the page.

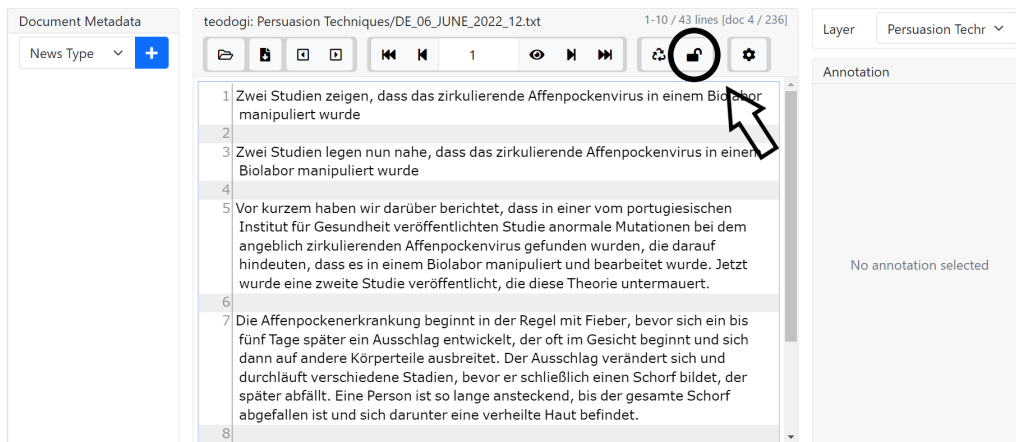


Figure 14: Finalizing the document.



Figure 15: Next page command.

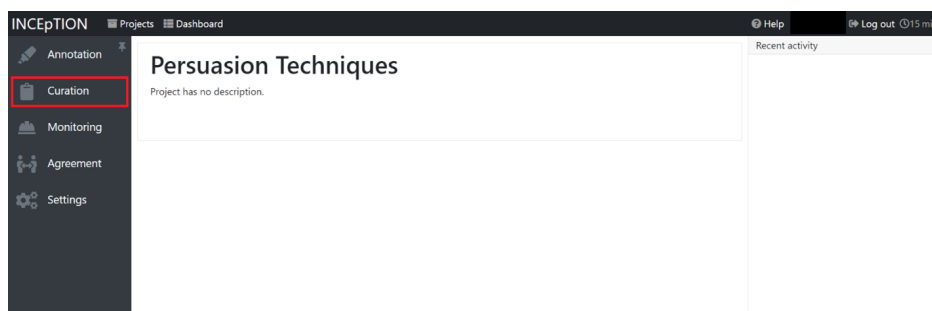


Figure 16: Start the curation of the documents.

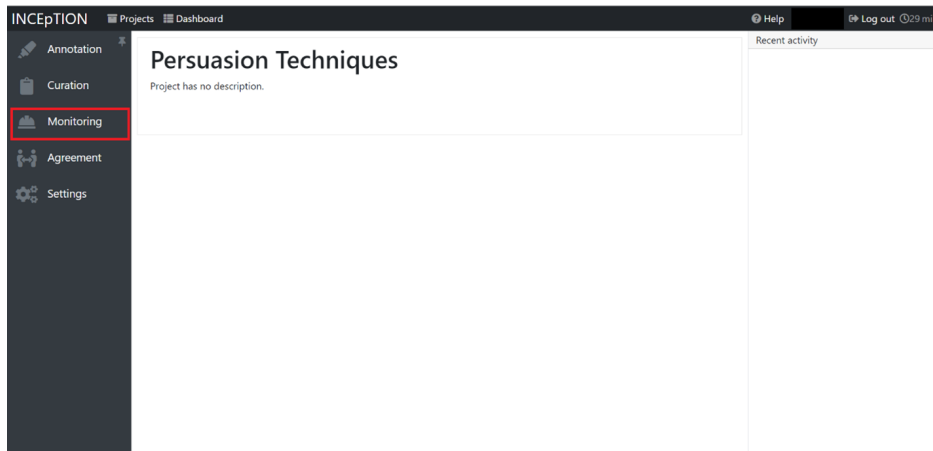


Figure 17: Monitor the status of the documents.

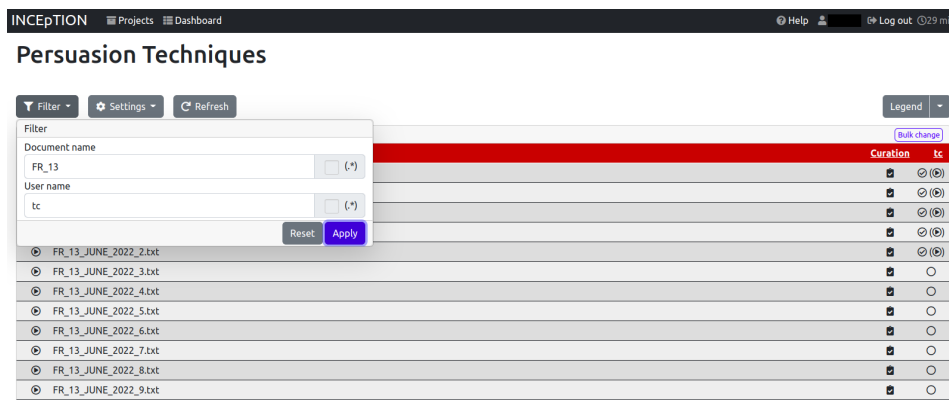


Figure 18: Filtering the documents w.r.t. their annotation status.

The document annotation is done and closed, ready for curation	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="radio"/>
The document annotation is not done, can be closed by clicking on the icon	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="radio"/>
The document is notannotated	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="radio"/>

Figure 19: Changing the status of the document.

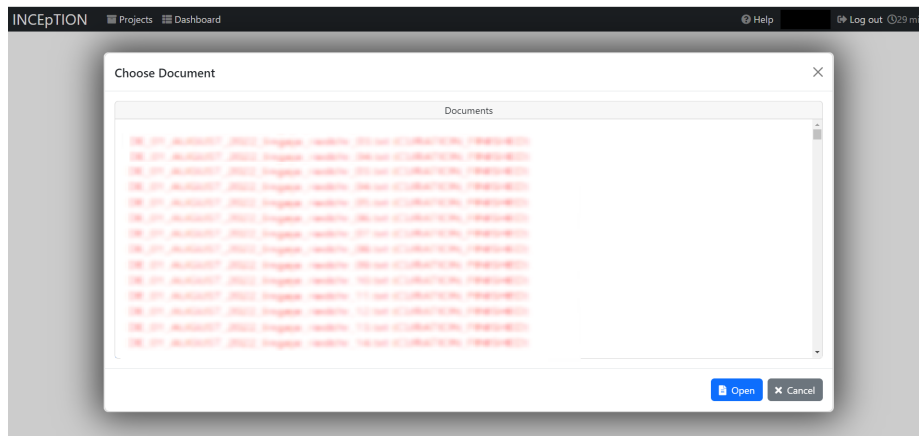


Figure 20: Choose the document from the list of documents.

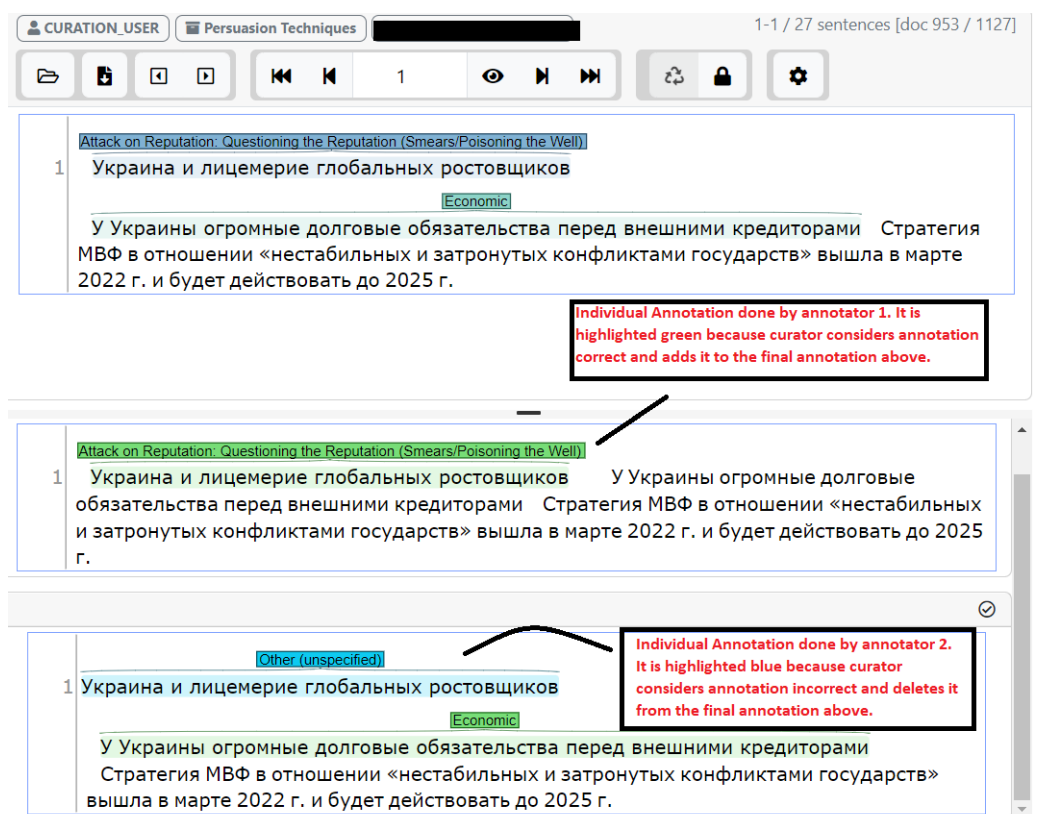


Figure 21: Main screen for curation.

## 8.2 Curation

Curation is the step of producing a final version of the annotation of a document, by taking into account the inputs of the different annotators. Below, the steps on how to use Inception for curation are briefly described.

1. **Start curation:** Curation can be started by clicking on 'curation' (see Figure 16).
2. **Check the status of documents:** Before opening a document to curate, it is necessary to check that the annotators have closed their documents (with the lock icon); if not, it is necessary to do it for them by going to the 'monitoring' interface (see Figure 17), searching for the document-annotator pairs using the 'filter' function (see Figure 18), and then clicking several times on the icon in order to make it change its status (see Figure 19).
3. **Open and edit a document:** Once the status of a document annotators worked on is set to 'closed', it is possible to open the document using the curation interface (see Figure 20). There, the upper frame contains the final document annotation. Below, the other frames contain the annotations of each individual annotator (see Figure 21). These annotations are automatically merged into the curated one when the document is opened for the first time (this is why it is important to make sure, all the annotators locked (finalized) their documents beforehand).
4. **Curate the document:** The frame containing the curated document can be edited freely, in order to correct or to add new annotations exactly in the same way as is done when annotating. Any annotation from the individual annotators (the frames below) can be transferred to the upper frame by clicking on the annotation. One traverses through the paragraphs by clicking on the central arrows, in the same way as is done during annotation.
5. **Close the document:** Once curation has been finished, the document must be marked as completed by clicking on the lock icon.

## 9 Lessons Learned

The annotation guidelines described in this document were used in the context of annotating circa 1000 documents in 6 different languages. Given that the effort was 'massive', i.e., it involved 3 different taxonomies of up to 23 labels, it lasted over a period of 8 months and resulted in approximately 40K text spans tagged, and involved in total more than 35 persons, there were various lessons learned along the way, that might prove useful when organizing such endeavours in the future, which we share here:

- **Document selection:** in order to select documents containing a high quantity of persuasion techniques, it proved effective not to extract from the most 'extreme' sources, but to identify polarising personalities and then looking for texts in their support or attacking them, potentially combined with keywords related to a given topic of interest.

- **Annotator selection:** the motivation factor plays a significant role. It is not possible to get high-quality annotated data by relying on highly unmotivated people, in particular, for such an annotation task, which we consider of moderate to high complexity. As such, it proved counterproductive to rely on volunteers working on annotation as a side project, because actually understanding the taxonomies requires a time investment and a commitment that most people working voluntarily are not ready to do, unless they are personally interested and motivated by the project or have some prior background knowledge about the task of text analysis. Much time was invested, and actually wasted, teaching people that later on did not deliver or delivered annotations of low quality that were identified only at the curation phase, and required significant additional time effort to be dealt with. Therefore, it is highly recommended to vet upfront candidate annotators based on trial annotations and/or to use some environment to carry out live tests, and regularly monitor the quality of the annotation.
- **Annotator bias:** is another factor to consider. In particular, annotators, who do have prior experience with media analysis, journalism, fact-checking tend to associate the task of annotating persuasion techniques with checking and validating claims, which is out of the scope in the context of the latter task. Therefore, it is recommended to put emphasis on this aspect at the very early stage to reduce the number of incorrect annotations. Furthermore, we also noticed that the naming conventions, i.e., the names of the persuasion techniques used, also play an important role. For instance, we experienced comments from annotators when labelling text as some type of ‘simplification’ referring to some relevant information missing (fact-checkers might be best positioned to spot it), thus making a piece of text a Simplification, while the real goal in the task at hand is to detect certain logical patterns in text, which is significantly different from the former. Consequently, based on our observations, we recommend to devote more time to explaining/training the annotators on persuasion techniques that may seem intuitive but are not. Conversely, we remarked that actually simple concepts were regularly misunderstood because these concept had non-intuitive names in the literature (e.g., Red-Herring) or had several different names, under which some of the annotators might already know them. It proved successful to both give a default name to the technique that is the most descriptive, but also to list the other common synonyms. For instance, instead of Bandwagon we used the name Appeal to Popularity (Bandwagon).
- **Annotator training:** should not only boil down to reading the guidelines and discussing the annotation of one document, even if the annotators are remunerated for the work. Annotators should be trained on a chunk of test documents until the quality of their annotation is deemed sufficient, and, as suggested earlier, vetted before real annotations start. Otherwise, the curation phase will take significantly more time, as the curator will unwillingly play the role of the annotator making up for low-quality annotations. The main role of the curation will appear then not to improve the quality, but to make sure that the data is not unusable. In order to better train annotators, we also introduced at some point a flashcard training system, with which both new and old annotators were trained by using good hand-picked examples taken along the way (such good quality material was missing at the start of the annotation campaign).

- **Annotation workflow:** the direct consequence of the three aforementioned points is that ideally annotation and curation should be streamlined, so that annotators receive immediate feedback on how to improve their annotations, and the manager has the possibility to decide whether to retrain or to remove an annotator who delivers poor-quality annotations. The way we did it, annotators were not provided with comparison of their annotations with curated documents, but with the other annotator's annotations, as curation was started only after all the documents had been annotated. It probably would have been better to streamline them and to run in parallel to help avoid the aforementioned problems. This is the approach taken later on during a subsequent annotation effort. However, it requires much more participation of the managers and as such limits how much a task can be split.
- **Curation procedure:** it did not prove sufficient to review both annotators annotations and to decide on a final one using the annotation tool alone for the following reasons:
  - there were several pairs of annotators, as well as different curators for different languages, which is a potential source of inconsistencies,
  - the annotation tool does not provide any functionalities to compare potential annotation inconsistencies for a given set of documents in a given language or across languages, and as such, the curator has a rather limited view in the graphical interface only on a particular fragment of the entire document, so even checking the consistency within the scope of a single document using the graphical interface is quite challenging.

In order to better address resolving potential inconsistencies, the following curation steps were introduced:

- a spreadsheet with all the annotations was created, which contained additionally the context of the annotation. Depending on the time available, a curator went through all or a subset of the most 'difficult' labels, and fixed any issues.
- a spreadsheet with all the annotations was created, and was sorted alphabetically, and the curator explored whether similar sentences (duplicates or near duplicates) were tagged with the same or similar labels (which should intuitively be the case), and whether there were any recurring inconsistencies in labelling, e.g., decided and propagated multi-label annotations for certain text snippets for which only partial annotations were done (complementarity issue),
- a similar-in-nature spreadsheet as the one above was created for annotations in different languages by using semantic distance with aligned multilingual embeddings to spot potential inconsistencies in a similar manner. This step was not introduced in our campaign, but we believe it could have provided useful feedback.

The main rationale here is that such spreadsheets provide a better way to check the annotations globally for potential inconsistencies, and reviewing the labels and doing the changes in the spreadsheet directly proved faster than reviewing



the documents one by one directly in the graphical interface of the annotation tool, as one gets swamped by navigating different articles, sentences and switching between different labels. As a matter of fact, the suggested changes in the spreadsheet (provided that the name of the document and the positional information is contained therein) can be used to automatically do the changes in the final annotation file in the target format (whatever this might be) instead of time-consuming manual reintroduction of the suggested changes in the spreadsheet to the annotation tool again.

To sum up, when carrying out large-scale annotations, i.e., ones that involve annotations of thousands of documents, the curation cannot be done by a single curator, and solely using the annotation tool. It requires the introduction of an additional curation layer (e.g., with spreadsheets) as depicted above to harmonize and to guarantee high-quality annotations.

## **10 Conclusions**

This report presented detailed guidelines for the annotation of online news and web documents with category (genre), framing dimensions, and persuasion techniques detected in the body of the documents. In particular, the underlying taxonomies, multilingual examples, annotation hints, the web-based annotation and training tools have been described in detail. Finally, important lessons learned from a large-scale annotation campaign carried out by the Text and Data Mining Unit of the EC Joint Research Centre has been summarized in this report. Given that this endeavour involved annotating approximately 1000 documents in 9 different languages and almost 40 people, we strongly believe the information and knowledge contained in the report will be useful when carrying out similar-in-nature annotation endeavours.

## References

- [1] Firoj Alam, Hamdy Mubarak, Wajdi Zaghouni, Giovanni Da San Martino, and Preslav Nakov. Overview of the WANLP 2022 shared task on propaganda detection in Arabic. In *Proceedings of the Seventh Arabic Natural Language Processing Workshop*, Abu Dhabi, UAE, December 2022.
- [2] Alberto Barrón-Cedeno, Israa Jaradat, Giovanni Da San Martino, and Preslav Nakov. Proppy: Organizing the news based on their propagandistic content. *Information Processing & Management*, 56(5), 2019.
- [3] Amber E. Boydstun, Dallas Card, Justin Gross, Paul Resnick, and Noah A. Smith. Tracking the Development of Media Frames within and across Policy Issues. <https://homes.cs.washington.edu/~nasmith/papers/boydstun+card+gross+resnik+smith.apsa14.pdf>, 2014.
- [4] Dallas Card, Amber E. Boydstun, Justin H. Gross, Philip Resnik, and Noah A. Smith. The media frames corpus: Annotations of frames across issues. In *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing (Volume 2: Short Papers)*, pages 438–444, Beijing, China, July 2015. Association for Computational Linguistics.
- [5] Loretta H Cheeks, Tracy L Stepien, Dara M Wald, and Ashraf Gaffar. Discovering news frames: An approach for exploring text, content, and concepts in online news sources. In *Cognitive Analytics: Concepts, Methodologies, Tools, and Applications*, pages 702–721. IGI Global, 2020.
- [6] Anton Chernyavskiy, Dmitry Ilvovsky, and Preslav Nakov. Transformers: “The end of history” for NLP? In *Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, ECML-PKDD’21*, 2021.
- [7] J. Cohen. A Coefficient of Agreement for Nominal Scales. *Educational and Psychological Measurement*, 20(1):37, 1960.
- [8] Giovanni Da San Martino, Alberto Barrón-Cedeño, Henning Wachsmuth, Rostislav Petrov, and Preslav Nakov. Semeval-2020 task 11: Detection of propaganda techniques in news articles. In Aurélie Herbelot, Xiaodan Zhu, Alexis Palmer, Nathan Schneider, Jonathan May, and Ekaterina Shutova, editors, *Proceedings of the Fourteenth Workshop on Semantic Evaluation, SemEval@COLING 2020, Barcelona (online), December 12-13, 2020*, pages 1377–1414. International Committee for Computational Linguistics, 2020.
- [9] Giovanni Da San Martino, Stefano Cresci, Alberto Barrón-Cedeño, Seunghak Yu, Roberto Di Pietro, and Preslav Nakov. A survey on computational propaganda detection. In *IJCAI*, 2020.
- [10] Giovanni Da San Martino, Shaden Shaar, Yifan Zhang, Seunghak Yu, Alberto Barrón-Cedeno, and Preslav Nakov. Prta: A system to support the analysis of propaganda techniques in the news. In *ACL*, 2020.

- [11] Giovanni Da San Martino, Seunghak Yu, Alberto Barrón-Cedeño, Rostislav Petrov, and Preslav Nakov. Fine-grained analysis of propaganda in news articles. In *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing, EMNLP-IJCNLP 2019, Hong Kong, China, November 3-7, 2019*, EMNLP-IJCNLP 2019, Hong Kong, China, November 2019.
- [12] Dimitar Dimitrov, Bishr Bin Ali, Shaden Shaar, Firoj Alam, Fabrizio Silvestri, Hamed Firooz, Preslav Nakov, and Giovanni Da San Martino. Detecting propaganda techniques in memes. In *Proceedings of the Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing, ACL-IJCNLP '21*, pages 6603–6617, 2021.
- [13] Dimitar Dimitrov, Bishr Bin Ali, Shaden Shaar, Firoj Alam, Fabrizio Silvestri, Hamed Firooz, Preslav Nakov, and Giovanni Da San Martino. Task 6 at SemEval-2021: Detection of persuasion techniques in texts and images. In *Proceedings of the 15th International Workshop on Semantic Evaluation*, 2021.
- [14] Robert M Entman. Framing: Towards clarification of a fractured paradigm. *McQuail's reader in mass communication theory*, pages 390–397, 1993.
- [15] Jennifer Golbeck, Matthew Mauriello, Brooke Auxier, Keval H. Bhanushali, Christopher Bonk, Mohamed Amine Bouzaghane, Cody Buntain, Riya Chanduka, Paul Cheakalos, Jennine B. Everett, Waleed Falak, Carl Gieringer, Jack Graney, Kelly M. Hoffman, Lindsay Huth, Zhenya Ma, Mayanka Jha, Misbah Khan, Varsha Kori, Elo Lewis, George Mirano, William T. Mohn IV, Sean Mussenden, Tammie M. Nelson, Sean Mcwillie, Akshat Pant, Priya Shetye, Rusha Shrestha, Alexandra Steinheimer, Aditya Subramanian, and Gina Visnansky. Fake news vs satire: A dataset and analysis. In *Proceedings of the 10th ACM Conference on Web Science, WebSci '18*, page 17–21, Amsterdam, Netherlands, 2018. Association for Computing Machinery.
- [16] Maurício Gruppi, Benjamin D. Horne, and Sibel Adali. NELA-GT-2019: A large multi-labelled news dataset for the study of misinformation in news articles. *arXiv*, 2003.08444, 2020.
- [17] Ivan Habernal, Raffael Hannemann, Christian Pollak, Christopher Klamm, Patrick Pauli, and Iryna Gurevych. Argotario: Computational argumentation meets serious games. In *EMNLP*, 2017.
- [18] Ivan Habernal, Patrick Pauli, and Iryna Gurevych. Adapting Serious Game for Fallacious Argumentation to German: Pitfalls, Insights, and Best Practices. In *Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018)*, pages 3329–3335, 2018.
- [19] Benjamin Horne and Sibel Adali. This just in: Fake news packs a lot in title, uses simpler, repetitive content in text body, more similar to satire than real news. *arXiv*, 1703.09398, 2017.

- [20] Kristina Hristakieva, Stefano Cresci, Giovanni Da San Martino, Mauro Conti, and Preslav Nakov. The spread of propaganda by coordinated communities on social media. In *Proceedings of the 14th ACM Web Science Conference, WebSci '22*, pages 191–201, Barcelona, Spain, 2022.
- [21] Haewoon Kwak, Jisun An, and Yong-Yeol Ahn. A systematic media frame analysis of 1.5 million New York Times articles from 2000 to 2017. In *Proceedings of the 12th ACM Conference on Web Science, WebSci '20*, pages 305–314, Southampton, United Kingdom, 2020.
- [22] Siyi Liu, Lei Guo, Kate Mays, Margrit Betke, and Derry Tanti Wijaya. Detecting frames in news headlines and its application to analyzing news framing trends surrounding US gun violence. In *Proceedings of the 23rd Conference on Computational Natural Language Learning, CoNLL '19*, pages 504–514, Hong Kong, China, 2019.
- [23] Giovanni Da San Martino, Alberto Barrón-Cedeño, Henning Wachsmuth, Rostislav Petrov, and Preslav Nakov. Semeval-2020 task 11: Detection of propaganda techniques in news articles. *CoRR*, abs/2009.02696, 2020.
- [24] Preslav Nakov, Firoj Alam, Shaden Shaar, Giovanni Da San Martino, and Yifan Zhang. COVID-19 in Bulgarian social media: Factuality, harmfulness, propaganda, and framing. In *Proceedings of the International Conference on Recent Advances in Natural Language Processing, RANLP '21*, 2021.
- [25] Preslav Nakov, Firoj Alam, Shaden Shaar, Giovanni Da San Martino, and Yifan Zhang. A second pandemic? Analysis of fake news about COVID-19 vaccines in Qatar. In *Proceedings of the International Conference on Recent Advances in Natural Language Processing, RANLP '21*, 2021.
- [26] Jeppe Nørregaard, Benjamin D. Horne, and Sibel Adali. NELA-GT-2018: A large multi-labelled news dataset for the study of misinformation in news articles. In Jürgen Pfeffer, Ceren Budak, Yu-Ru Lin, and Fred Morstatter, editors, *Proceedings of the Thirteenth International Conference on Web and Social Media, ICWSM '19*, pages 630–638, Munich, Germany, 2019. AAAI Press.
- [27] Hannah Rashkin, Eunsol Choi, Jin Yea Jang, Svitlana Volkova, and Yejin Choi. Truth of varying shades: Analyzing language in fake news and political fact-checking. In *EMNLP*, 2017.
- [28] Seunghak Yu, Giovanni Da San Martino, Mitra Mohtarami, James Glass, and Preslav Nakov. Interpretable propaganda detection in news articles. In *Proceedings of the International Conference on Recent Advances in Natural Language Processing (RANLP 2021)*, Held Online, September 2021. INCOMA Ltd.
- [29] Yifan Zhang, Giovanni Da San Martino, Alberto Barrón-Cedeño, Salvatore Romeo, Jisun An, Haewoon Kwak, Todor Staykovski, Israa Jaradat, Georgi Karadzhov, Ramy Baly, Kareem Darwish, James Glass, and Preslav Nakov. Tanbih: Get to know what you are reading. In *Proceedings of the Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing: System Demonstrations, EMNLP-IJCNLP '19*, pages 223–228, Hong Kong, China, 2019.

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