# PluriProppy: Plurilingual Propaganda Identification in Social Media

#### Alberto Barrón-Cedeño

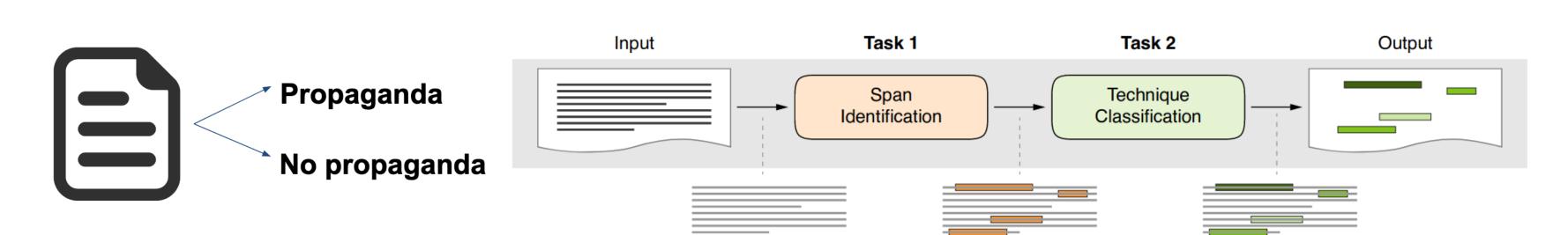
Università di Bologna a.barron@unibo.it @ albarron





#### Identifying propaganda in text

- The concept of what is a "fake news" is not clear for the lay public
- Once a piece of misinformation turns viral, there is hardly anything to do
- Propaganda is used to influence an audience and is used in misinformation



## Document level [1]

Binary classification

### Fragment level [2]

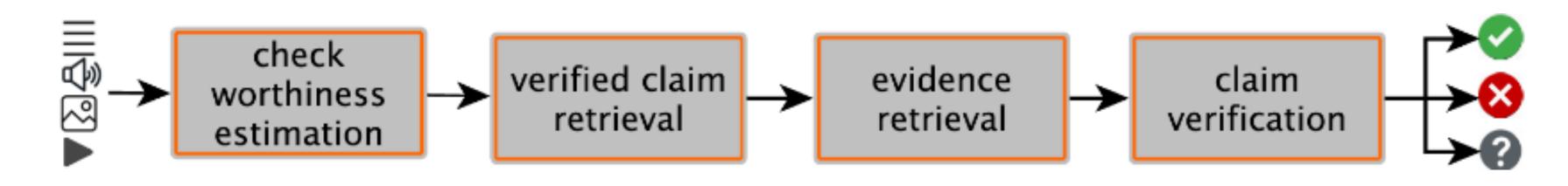
Sequence labeling; multi-class

- [1] Barrón-Cedeño et al. Proppy: Organizing the news based on their propagandistic content. IP&M 56(5), 2019
- [2] Da San Martino et al. Fine-Grained Analysis of Propaganda in News Articles. EMNLP 2019



#### Detecting Check-Worthy Claims, Previously Fact-Checked Claims, and Fake News

Series of CLEF labs to foster the development of NLP and IR technology to assisst investigative journalists in the verification process



- [3] Barrón-Cedeño et al. Overview of CheckThat! 2020: Automatic Identification and Verification of Claims in Social Media. CLEF 2020
- [4] Nakov et al. The CLEF-2021 CheckThat! Lab on Detecting Check-Worthy Claims, Previously Fact-Checked Claims, and Fake News. ECIR 2021



- Switch from
  - to to
- Combine NLP with network analysis



Join efforts with journalists to polish the pipeline and its modules

#### Both fostering multilingualism:

multilingual datasets • cross-language models • multilingual analysis

#### Ongoing PhD research

Analysis of (human) translations of political content in global news agencies

#### Future PhD research

Identification and analysis of misogyny and aggressive messages in social media

#### Ongoing PhD research

Identification of (multimodal) propaganda in social networks