

Analyzing Women's Representation and Gender Bias in AI Media Coverage

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Abstract

In a context where Artificial Intelligence (AI) is gaining social, economic, and political relevance, it is essential to **examine how media narratives around this technology are constructed**, particularly with regard to **the role of women** as experts, protagonists, or information sources.

As noted in [1], fully automated solutions can introduce safety, ethical, and legal risks, while fully manual approaches may be both error-prone and time-consuming. Therefore, this work proposes **AI as a helpful tool that augments rather than replaces human judgement**.

Methodology

Following [2] two approaches for the analysis will be conducted. In the **quantitative** phase, we examine the **presence and roles of women** in relation to variables such as media type, news topic, and the roles ascribed to them. The **qualitative** phase focuses on **identifying and interpreting specific fragments** where biases, narrative patterns, or gender stereotypes emerge, offering a deeper understanding of the discourse.

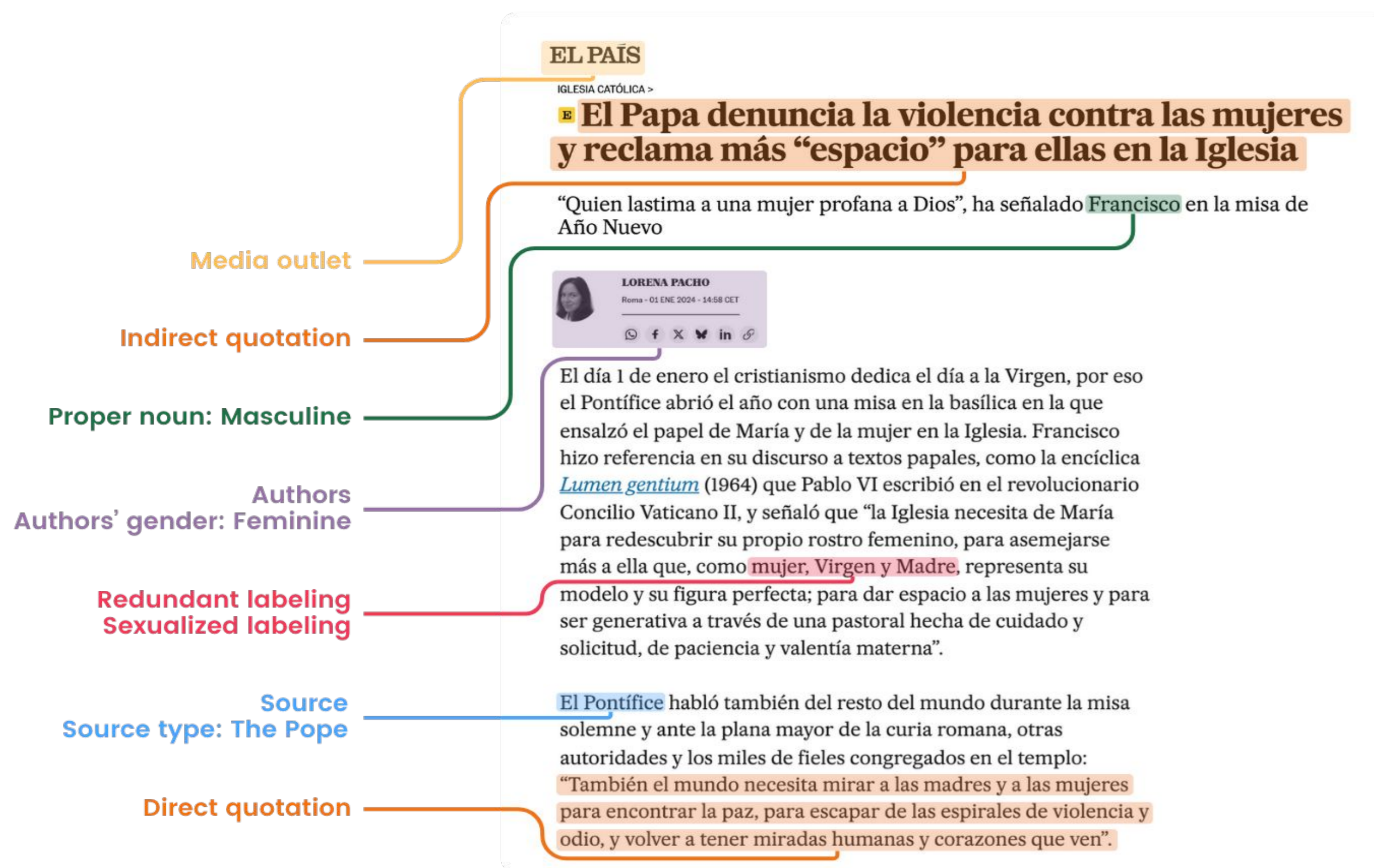
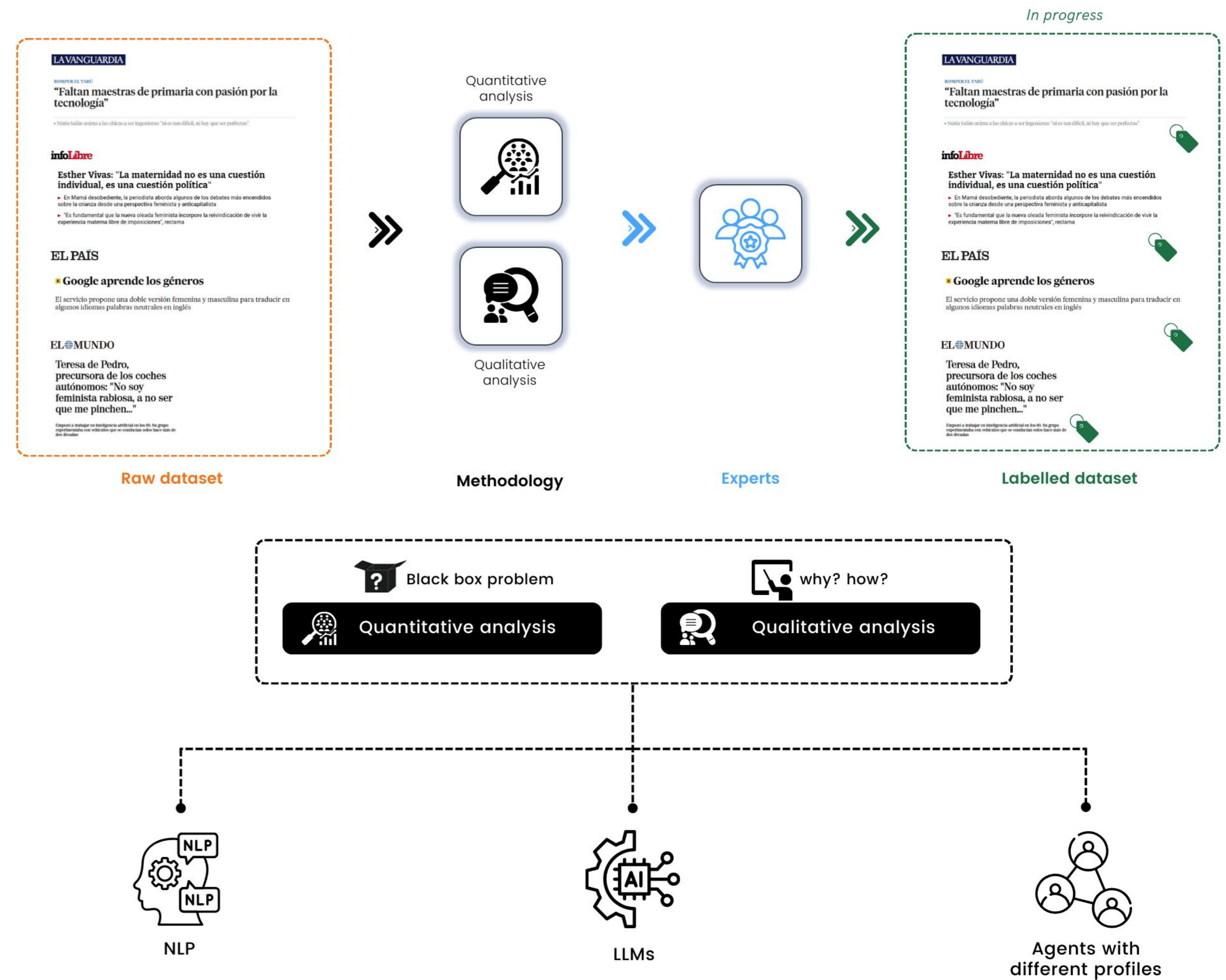


Figure 1. Example of annotated article

In particular, we are working with a hybrid methodology that combines traditional NLP tools with state-of-the-art LLMs: we use **Flair's ner-spanish-large** [3] for named-entity recognition, **genderize.io** [4] for gender inference, and **OpenAI's models** [5] to perform zero-shot validation and consistency checks.



Figures 2 and 3. Pipeline of the analysis and models

Interactive web application

To maximize the impact and accessibility of our research, we are developing an interactive web application that **allows users to explore and analyze texts in real time**.



Figure 4. Tentative mockup for the web application

References

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