Leveraging Temporal Analysis to Predict the Impact of Political Messages on Social Media in Spanish

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This poster and the paper:

Problems

Unknown influence of the temporal context on the impact of political messages.

Model **limitations for emulating** and predicting **discussion dynamics** in social networks.

Lack of methods to identify **periods of high social or political sensitivity**.

Research Questions

RQ1: How does the **virality** of a political message **vary** according to the temporal context in which it is published?

RQ2: How can LLMs **emulate and predict the** dynamics of the social media **debate** provoked by a political message?

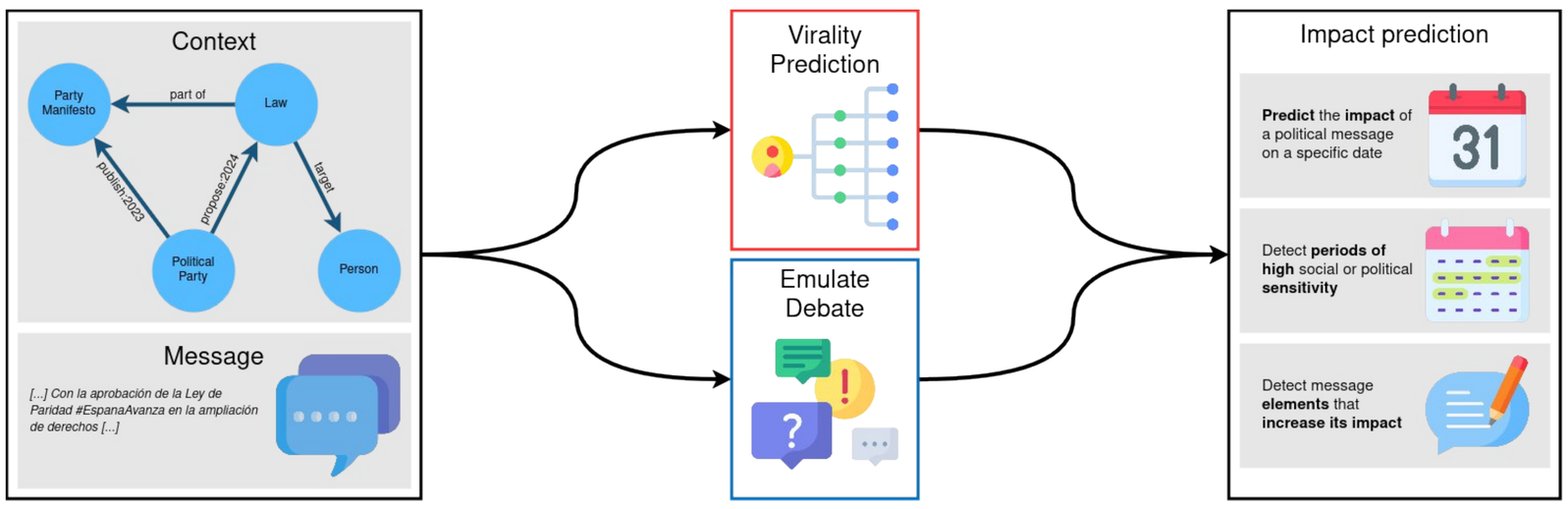
RQ3: How can the social **impact** of political message be **measured** at different points in time?

RQ4: What are the **periods** of high social or political sensitivity during which the publication of a political message has the **greatest impact**?

Goals

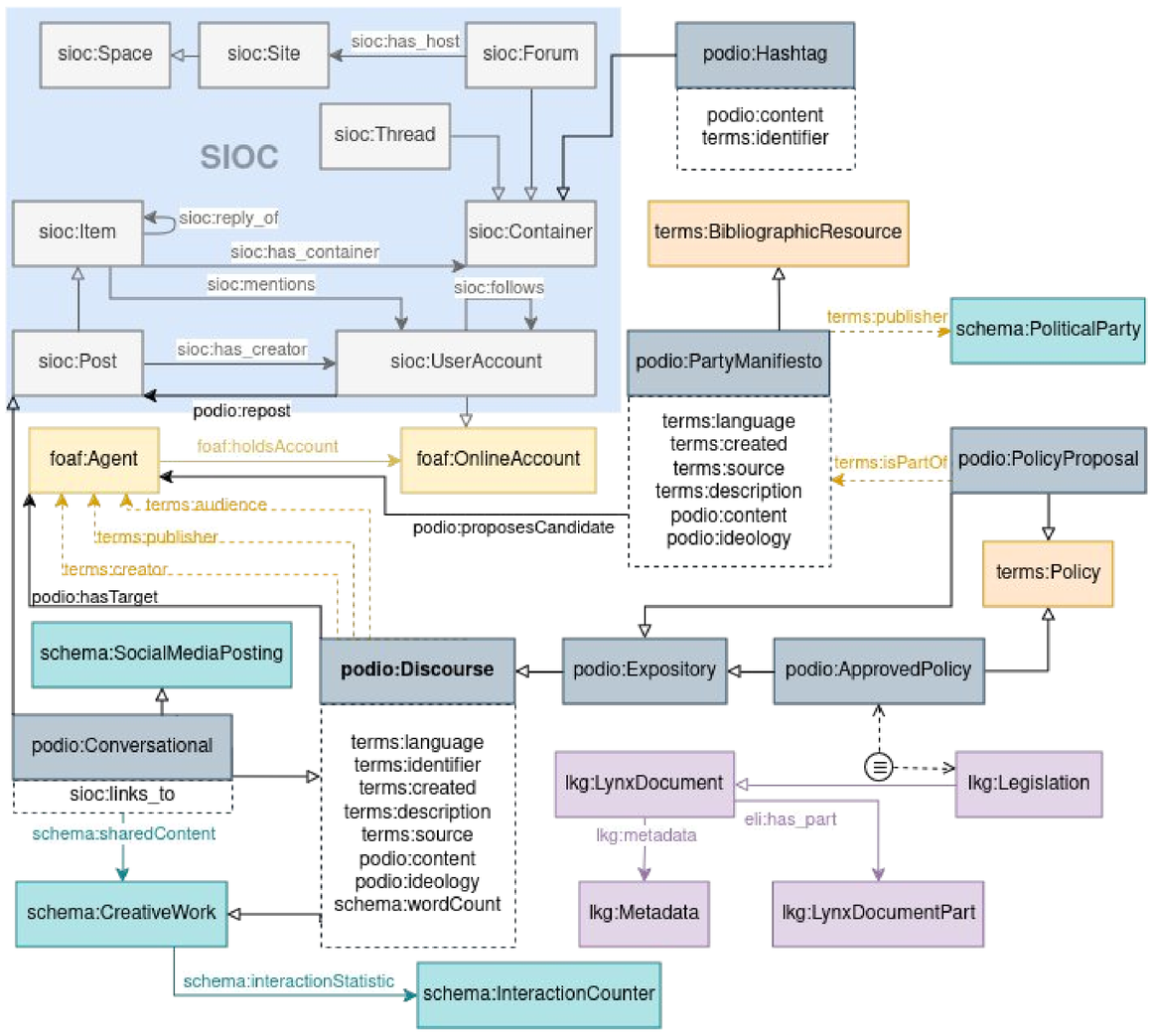
1. Develop tools to **predict the virality** of a political message **based on the moment** of its publication and the **elements** that increase its impact.
2. Improve the **performance** of Spanish language models **to emulate the behavior of different communities**.
3. Develop **methods to measure the social impact** of political messages at different times and **detect periods of higher sensitivity**.

Methodology



Ongoing Work

- **Corpus of disinformative political messages in Spanish spread on Telegram.**
- **Representation of the political context**. PODIO: A POlitical DIscourse Ontology (Pending to be published). *https://w3id.org/podio*



Future Work

1. **Predict virality**.
   - Explore different approaches to achieve good performance.
2. LLM-s for **emulation of the debate around a political message**.
   - Explore the performance of the different models for Spanish.
   - Enrich the model with the needed information to emulate the behaviour of each community.
3. Predict **impact on a specific date**.
4. Detect **elements that increase a message impact**.
5. Identify **periods of highest sensitivity**.

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