The Case of Spanish as a Pluricentric Language: Challenging the Monolingual Bias in NLP to Improve Cultural Adequacy of LLMs

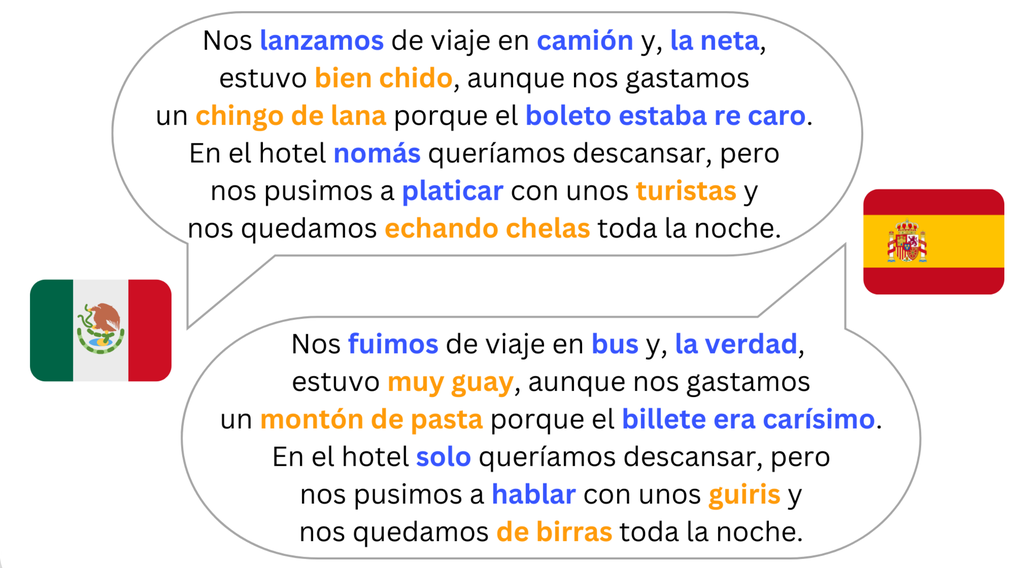
María Grandury, Diana Galvan-Sosa
Universidad Politécnica de Madrid | EPFL | University of Cambridge | SomosNLP

SomosNLP

Overview

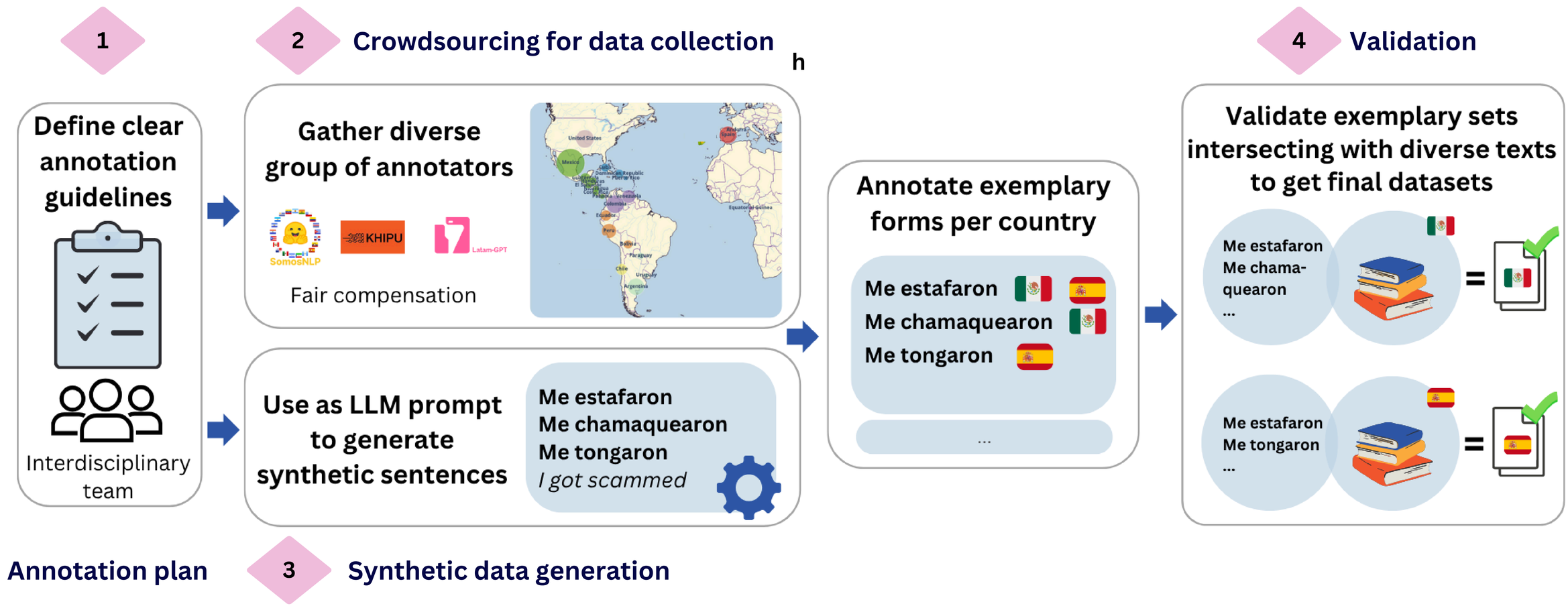
- **Main problem:** The "standard Spanish" misconception hinders truly effective NLP.
- **Our position**: NLP must account for cultural diversity by recognizing the **pluricentricity** of Spanish.
- **Our proposal:** Community-driven annotation framework that validates **each Spanish-speaking nation** as a center of linguistic standardization.

The Pluricentric Status of Spanish



- Pluricentric languages have **multiple centers** from which standards emerge.
- Coseriu (1990) distinction: Linguistic forms are either CORRECT (situational) or **EXEMPLARY (standard)**.
- Our central claim: **Cultural adequacy** hinges on the exemplarity of linguistic and gramatical forms.

Proposed Annotation Framework



Spanish Representation in Multicultural Datasets

Dataset	Spanish Subset Size	Spanish-speaking Countries
BLEnD (Myung et al., 2024)	40k QA pairs	ES, MX
INCLUDE (Romanou et al., 2024)	550k QA pairs	PE, ES
Global MMLU (Singh et al., 2024)	14k QA pairs	BO, HN, MX, PE, +
CVQA (Romero et al., 2024)	10k QA pairs	AR, CO, CL, EC, ES, MX, UY
Kaleidoscope (Salazar et al., 2025)	1.5k QA pairs	AR, CO, ES
Aya Collection (Singh et al., 2024)	4.5M pairs	Unknown
#Somos600M (Grandury, 2024)	2.3M pairs	AR, ES, CL, CO, CR, MX, PE, PY, VE
FineWeb2 (Penedo et al., 2025)	54k annotations	Unknown

- 🤝 **Community engagement** — Most prioritize native or fluent speakers. Variable community involvement.
- 👥 **Demographic reporting** — Inconsistent: half of them omit it, others detail country of origin and residence.
- 🌎 **Spanish variations** — Significant underrepresentation of Spanish linguistic diversity.
- 💰 **Compensation** — Two models: academic recognition and direct monetary incentives.
- 🕵️ **Data quality and eval** — Inconsistent: half of them omit it, others rely on “language leads”.

Ongoing work

- Survey **existing resources** (dictionaries, glossaries) created by linguistic and sociological experts.
- Review multilingual and Spanish-only **shared tasks.**

Join our cultural data collection!

We aim to create a **cultural benchmark** and an **alignment dataset** for Ibero-America. Join us to improve the representation of your country!

maria.grandury@somosnlp.org
@mariagrandury

Join us now! somosnlp.org/**hackathon**