

Towards Tracing Knowledge Flows in Martial Arts

BIOGRAPHICAL DATA AND INTERPERSONAL CONTACTS

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Context

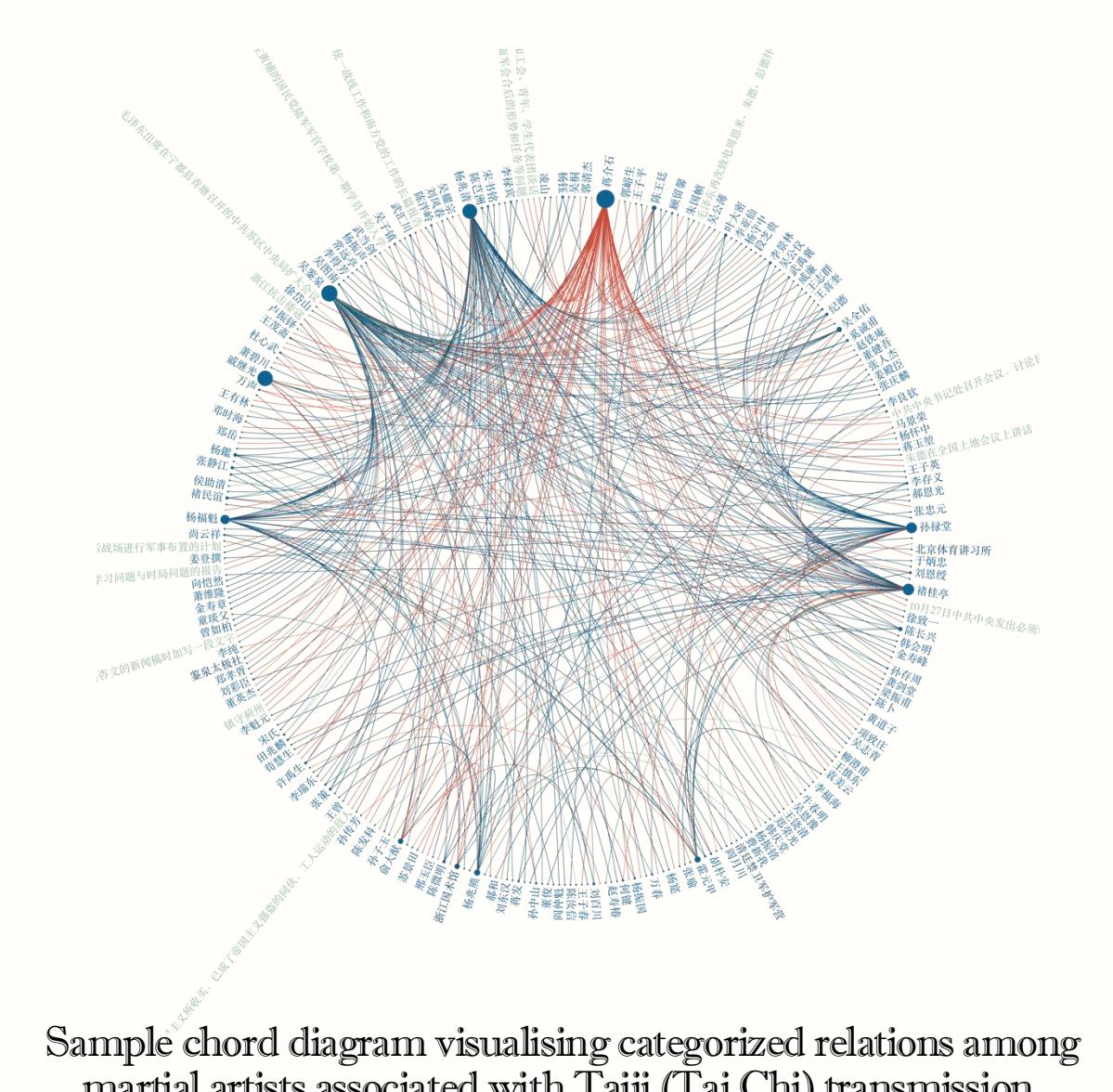
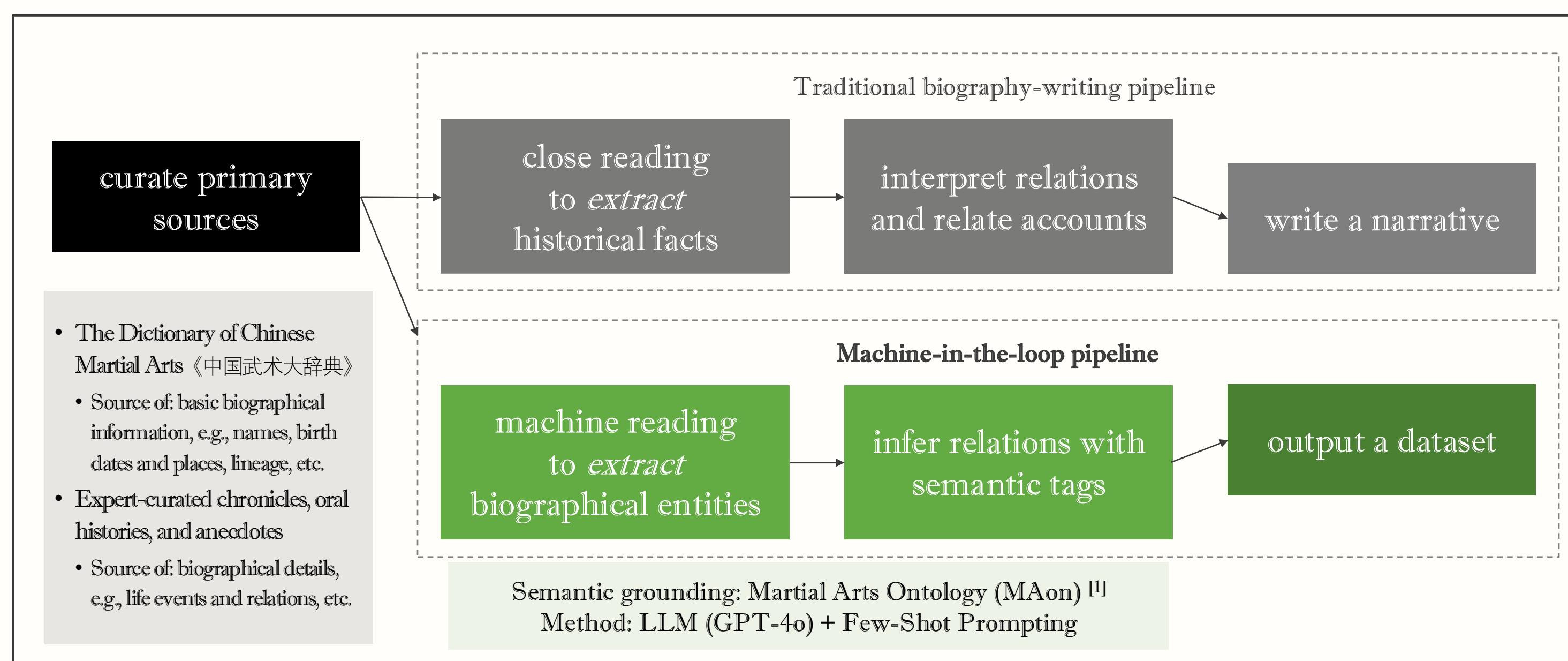
- Martial arts are forms of embodied knowledge passed on through interpersonal interaction. The relationships among practitioners play a crucial role in knowledge transmission.
- In Chinese history, martial artists were rarely scholars. Historical materials about them are sparse and often contain ambiguous or even contradictory accounts.
- Scholars have attempted to write biographies based on archival research, yet the process remains selectively condensed, interpretive, and inevitably biased.



PROPOSITION

Construct evidence-based biographical and relational datasets through entity extraction across multiple sources.

Provide a graph-data foundation for detecting contact patterns and contradictory relational properties.



Sample chord diagram visualising categorized relations among martial artists associated with Taiji (Tai Chi) transmission.

Lessons Learned

[1] Martial Arts Ontology (MAon) is available at <https://purl.org/maont/techCorpus>.

- Normalisation** is essential when processing heterogeneous sources. Use **reference tables** to standardise appellations, time expressions, regional names, etc.
- With tuned few-shot instructions, LLMs perform more effectively in extracting relations from nuanced Chinese texts. However, they still tend to **confuse relational direction** when faced with less-common or inherently ambiguous expressions.
 - Potential solutions:**
 - Fast but naïve: identify frequently confusing terms and regulate them using indicator-based or rule-based extraction.
 - Scalable but costly: train supervised models by feeding corrected directional relations along with their source excerpts.
 - Balanced approach: use multiple models to cross-check results and flag contradictory inferences for expert review.
- A cautionary note:**
 - Domain experts play a pivotal role in curating core sources, but **they are often trained to rely on materials that reflect mainstream narratives**. This (un)intentionally produces patterns that appear more consistent and less contradictory or critical.
- Good practice to emphasise:**
 - Preserve source excerpts alongside each extraction.** This enhances explainable machine inference, human verification and overall transparency, and can also serve as secondary training data should further training or fine-tuning become necessary.